

*

UMASS/AMHERST

*

312066 0344 1988 9

THE CITY LIBRARY ASSOCIATION
OF SPRINGFIELD, MASSACHUSETTS
LITERATURE • ART • SCIENCE

THE
DAVID A. WELLS
ECONOMIC LIBRARY
IN THE
CITY LIBRARY
SPRINGFIELD
MASSACHUSETTS



STACK

354.91
P53

1929

GIVEN BY
U.S. War dept.

354.91
P53

City Library Association, Springfield, Mass.



Digitized by the Internet Archive
in 2009 with funding from
Boston Library Consortium Member Libraries

ANNUAL REPORT
OF THE
GOVERNOR GENERAL
OF THE PHILIPPINE ISLANDS
1929

MESSAGE FROM THE PRESIDENT OF THE UNITED STATES TRANSMITTING REPORT OF THE GOVERNOR GENERAL OF THE PHILIPPINE ISLANDS, INCLUDING THE REPORTS OF THE HEADS OF THE DEPARTMENTS OF THE PHILIPPINE GOVERNMENT FOR THE CALENDAR YEAR 1929



DECEMBER 5, 1930.—Referred to the Committee on Insular Affairs and ordered to be printed

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1931

STACK

80-100

1-52

17/7/71

CONTENTS

	Page
Message of transmittal	v
Letter of transmittal	vi
Report of Gov. Gen. Dwight F. Davis	1
Inaugural address	1
The cabinet	1
The council of state	2
Opening of the legislature	2
Delay in legislation	3
Important legislation approved	3
The general economic situation	7
Administrative investigations	7
Department of Public Instruction	8
Department of Finance	9
Department of the Interior	14
Department of Commerce and Communications	14
Department of Agriculture and Natural Resources	15
The Governor General's advisers	17
Inaugural address	18
Message of Governor General to Legislature	20
Report of the Secretary of the Interior	29
Report of the Secretary of Public Instruction	43
Report of the Secretary of Finance	77
Report of the Secretary of Justice	139
Report of the Secretary of Agriculture and Natural Resources	159
Report of the Secretary of Commerce and Communications	199

MESSAGE

To the Congress of the United States:

As required by section 21 of the act of Congress approved August 29, 1916, entitled "An act to declare the purpose of the people of the United States as to the future political status of the people of the Philippine Islands, and to provide a more autonomous government for those islands," I transmit herewith, for the information of the Congress, the report of the Governor General of the Philippine Islands, including the reports of the heads of the departments of the Philippine government for the calendar year 1929.

I concur in the recommendation of the Secretary of War that this report be printed as a congressional document.

HERBERT HOOVER.

THE WHITE HOUSE, December 4, 1930.

LETTER OF TRANSMITTAL

WAR DEPARTMENT,
Washington, November 29, 1930.

DEAR MR. PRESIDENT: I inclose the annual report of the Governor General of the Philippine Islands and the reports of the heads of the several departments of the Philippine government for the calendar year 1929, together with drafts of messages for your signature, transmitting them to the Congress, as required by section 21 of the act of Congress, approved August 29, 1916, entitled "An act to declare the purpose of the people of the United States as to the future political status of the people of the Philippine Islands, and to provide a more autonomous government for those islands."

I believe that this report, with its appendixes, should be printed, as they contain valuable and historical information, and I so recommend.

Respectfully yours,

PATRICK J. HURLEY,
Secretary of War.

The PRESIDENT,
The White House.

ANNUAL REPORT OF THE GOVERNOR GENERAL OF THE PHILIPPINE ISLANDS

OFFICE OF THE GOVERNOR GENERAL,
Manila, P. I., May 1, 1930.

The honorable the SECRETARY OF WAR,

Washington, D. C.

SIR: I have the honor to submit the following annual report for the calendar year 1929.

Inasmuch as the annual report of my predecessor, the Hon. Henry L. Stimson, covered the period of his term as Governor General which included the first two months of 1929, and as the undersigned occupied the position of Governor General only during the last half of the year this report, will be confined to this period.

INAUGURAL ADDRESS

Upon arrival in Manila on July 8, 1929, the Governor General's party was accorded a welcome which was in full keeping with the traditional reputation of the Filipino people for hospitality. It is impossible to witness a demonstration of this nature without being deeply impressed with the unshaken loyalty of the Filipino people for the American flag. In the inaugural address delivered that day it was made clear that the new administration contemplated no radical changes in the organization of the Government, but proposed to work with the existing machinery, emphasizing especially economic development and elimination of dishonest and incompetent officials. It was also pointed out that the determination of the future political status of the islands was a matter for Congress to decide and the subject was one which the Governor General did not feel it proper for him to discuss. A complete copy of this address is attached to this report as an appendix.

THE CABINET

All of the department secretaries who had been appointed by my predecessor were requested to remain in office and the government organization was thus kept functioning with a minimum of confusion. The secretaries, without exception, continued to cooperate fully and loyally with the Governor General. They were in constant touch with the legislature and kept the executive fully informed regarding pending legislation. After the close of the session they showed a most commendable spirit of independence and impartiality in making recommendations for approval or disapproval of legislation on its merits without regard to the political considerations involved.

THE COUNCIL OF STATE

The council of state, composed of the leaders of the legislature and the department secretaries, which had been created by executive order of my predecessor, was continued, and, although its functions are solely advisory, it served a very useful purpose in providing for full discussion and mutual understanding of matters affecting legislative policy.

An advisory body of this nature is of especial value in providing a means of adjusting conflicting views on such matters as the budget. After full discussion in the council of state, the budget for the general expenses of the government was submitted to the legislature by the executive early in the session. It was passed by the legislature as submitted and was later approved by the Governor General without any changes. The legislative leaders are in favor of extending this plan to the public works appropriation bill and it is hoped to extend the procedure to cover these appropriations also.

OPENING OF THE LEGISLATURE

In the address to the legislature which was delivered on July 16, the week following the inaugural address, the same general recommendations and statement of policy were reiterated. A copy of this address is also attached to the report.

On this occasion brief mention was made of the campaign which had been started in the United States against certain Philippine exports, notably sugar. After expressing opposition to this policy, the opportunity was taken to point out the desirability of decreasing the cultivation of sugar of which there is a world oversupply and concentrating energetically upon a greater diversification of crops for which there is not only a local demand but a ready market for the surplus abroad. Similar statements were made by leaders here, and it is believed that this campaign will show definite results in the future.

The attitude of the Filipino people toward the threat of legislation which would restrict the entry of their products to the American market was admirable. The position of all elements was that the Filipino people could depend upon the good faith and sense of justice of the American people, and loose and irresponsible statements which might have been used to stir up ill feeling were conspicuous by their absence.

These two addresses appeared to meet with a very favorable reception by the leaders of the government and the public in general. Throughout the year the entire legislature showed a most commendable spirit of cooperation which was equalled by the officials of the various departments and bureaus. Credit for this spirit is largely due to the earnest and patriotic example of the leaders of the legislature, who demonstrated intelligent leadership of a very high order.

RESULTS OF THE LEGISLATIVE SESSION

The second session of the eighth legislature (July 16 to November 8) was fruitful in legislation, some of which should be of lasting value. The session was characterized throughout by the greatest harmony between the leaders and members of the legislature on the one hand,

and the executive departments on the other. Before definite action was taken on any important legislation, the matter was made the subject of informal conference between the legislature and the various executive officers of the government, and each party was kept fully informed of the attitude of the other. Differences of opinion naturally exist but by keeping in close touch with each other a minimum of friction results.

Altogether 187 bills were passed by both houses of the legislature, and in addition three joint resolutions and a number of concurrent resolutions were adopted.

Of the 187 bills passed, 140 were approved, of which 133 became law at that time and 7 were transmitted to the United States for consideration by the President or the Congress as required by law.

DELAY IN LEGISLATION

It was necessary to disapprove 40 bills, or 21.4 per cent. This was partly due to the fact that there was a considerable delay in the final approval of measures introduced in the legislature.

Of the 187 bills enacted, 137 were finally passed on November 8 (the one-hundredth day of the session), and only 15 were adopted before November 1.

Sixty-two were finally acted on by both houses on November 8. Of the 40 bills vetoed, 34 were passed on November 8. The largest number of bills passed in any of the preceding seven sessions was 122 (in 1926 in 100 days).

On November 8 the house actually acted on 84 bills and the senate on 114. This only includes measures which finally passed both houses. This situation was unsatisfactory to many members of the legislature and was properly severely criticized by the press. The legislative leaders have assured me that a similar situation will not arise in 1930.

Consideration of the bills by the executive was further impeded by the fact that English copies of the enrolled bills were not forwarded promptly.

There remained 172 bills to be acted on (in 30 days, including Sundays and holidays) when the legislature adjourned. Of these only 15 were submitted to the executive within the first 12 days after adjournment. After 15 days only 80 had been received. After 21 days, 31 had not been submitted. One bill was actually sent in 28 days after adjournment.

Most of the measures which were disapproved contained faulty phraseology and showed signs of lack of careful study as to the possible results thereof. These defects could have been remedied in most instances by committee consideration, public hearings, and debate.

It would also expedite legislation if the departments would formulate a definite program of legislation affecting their departments in advance of the opening of the legislature. I am assured by the department secretaries that this will be done in 1930.

IMPORTANT LEGISLATION APPROVED

Among the more important measures which became law was the so-called "Sheriffs' bill" (act 3598). This was a measure for which the Philippine and American Bar Associations, the Department of

Justice, and many others had worked for years. The new law provides that provincial sheriffs shall be appointed by the secretary of justice and gives certain definite qualifications for such officials, including the study of law in a recognized school for an extended period. In the past, these officers had been purely political appointees, their fees being paid to the provincial governors, and it is felt that this measure will bring about very beneficial results.

Another measure (act 3540) provided for the appointment of a committee to study the ways and means of promoting the economic development of Mindanao, Sulu, and other specially organized provinces. This committee was appointed, and as required by the act will report the result of its work and its recommendations before the opening of the next session of the legislature.

Act 3597 provides for the annual expenditure beginning January 1, 1930, of not more than ₱2,000,000 per annum out of the unexpended surplus remaining at the end of the preceding calendar year for the construction of a group of insular government buildings in Manila, in the government center, in accordance with the Burnham plan, which it is hoped will ultimately replace all the insular offices scattered in many parts of the city of Manila. The total expenditure was limited to ₱25,000,000.

A law for which there was a crying need, was the act amending the marriage law (act 3613). This legalizes non-Christian and tribal marriages, provided only that they are performed in accordance with the rites and practices of non-Christian religions or in accordance with the tribal customs.

In the case of the Christian inhabitants of the islands, the requirements for marriage were simplified, as it was found that the existing procedure was so technical that it had in many cases tended to discourage marriage and to encourage illegal unions. A third provision permits the immediate marriage of female citizens of the United States or foreign countries who come out to the Philippine Islands to marry bona fide residents thereof.

Very comprehensive changes were made in the banking provisions of the corporation law (act 3610), tending to encourage agricultural loans and permitting the banks to give increased credit to farmers under proper safeguards.

A measure was adopted creating a court of appeals. This was approved and transmitted to the congress for its consideration, as required by law. This act was intended to relieve the serious congestion of cases in the supreme court.

A measure was adopted and subsequently approved by the President of the United States increasing the import duty on bovine animals, including bulls, cows, and oxen. The present duty of \$2 per animal was increased to \$3, and an increase of \$1 more each second year was provided for until January 1, 1937, when the maximum duty of \$7 per head will apply.

The purpose of this measure, as stated in its title, is to promote and protect the livestock industry of the Philippine Islands. Under the present law there is an absolute prohibition against the importation of such animals into the islands, but this prohibitory law contained a proviso permitting the Governor General by proclamation to allow a limited number of such animals to be imported annually for consumption. Under this proviso a limited number of animals have

been admitted annually for some years, subject, of course, to the payment of the duties prescribed by law.

The cattle growers in the islands feel that the situation no longer requires the admission of foreign cattle and that they can fully supply the demands of the people from local sources. It has, therefore, been determined that the entry of foreign cattle will not be permitted after July 1, 1930. If the local dealers are able to fully supply the market, this prohibition will be continued. If not, the Governor General may by proclamation again permit the importation of foreign cattle, but in that event, the local dealers will be protected against disastrous competition by the graduated increase in import duties provided for by the new law.

It was also decided to abolish the bureau of agriculture January 1, 1930, by dividing its personnel between two new bureaus known as the bureau of animal industry and the bureau of plant industry.

It was found that the study of the means of improving the agricultural crops, such as rice, coconuts, sugar, tobacco, etc., and the superintendance of the measures necessary to prevent these crops being affected by pestilences, etc., must necessarily be intrusted to experts, who would have no knowledge whatsoever of the proper method of improving breeds or types of domestic animals or in controlling and eradicating dangerous and communicable diseases to which they are subjected.

The experts in each of these two distinct lines of endeavor were, therefore, transferred to the new bureaus, and while the former chief of the bureau of agriculture, a veterinarian, was appointed chief of the bureau of animal industry, an expert on plant industry was appointed to head that bureau. The results of this change have already demonstrated its wisdom.

With a view to promoting tourist travel in and to the islands, a measure was enacted under which ₱100,000 became available during the year 1930, provided that an equal amount should be contributed by private citizens. In the event that ₱100,000 is not so contributed, the measure provided that the government may provide an amount equal to the funds privately contributed. I believe this law will permit an examination into and study of the possibilities of developing this industry. Once that has been done, knowledge of the many places of interest and natural beauty spots (which are in my opinion unequaled in any part of the world) given proper publicity in the United States and foreign countries and proper facilities provided to enable tourists to travel through the islands conveniently and comfortably, a new and constantly increasing source of income to the government and the people would result.

A bill was approved authorizing the opening of a branch of the college of liberal arts of the University of the Philippines, at Vigan, in the Province of Ilocos Sur. This was principally due to the fact that a former Governor General had approved a bill in 1921 approving the establishment of this branch at Vigan. It was made clear that I did not approve a policy of creating additional branches of the university in different parts of the country at the present time. No further branches should be contemplated for some years to come and then only if recommended by the board of regents after a careful study of the places in which the establishment of such branches would be most beneficial to the entire Archipelago.

One of the outstanding achievements of the session was the enactment of a law prescribing the form for measures granting electric light and power franchises. This had been advocated by a joint committee of the Philippine and American Bar Associations in cooperation with the Public Service Commission and was based upon a study of model franchise laws adopted by various States of the United States. In one particular, however, the proposed form was disregarded. It had been recommended that franchises granted by the legislature should only be transferable with the approval of the Public Service Commission. The law in question provided that legislative franchises could not be disposed of without the approval of the legislature. In other words, legislative franchises could not be transferred at all except during a legislative session, thus leaving a period of more than eight months annually during which it would be impossible to transfer such franchises.

I shall recommend to the third session of the legislature that before enacting any franchise bills, it should require a certificate from the public service commission as to their necessity as provided for by law at present, and that it should amend section 15 of the uniform franchise law to provide that legislative franchises may hereafter be transferred or disposed of with the approval of the public service commission, as recommended by the bar associations. Such a provision is in line with the most modern legislation on public utilities.

Other laws of importance are those authorizing United States national banks to use their domestic names in doing business here, providing for the employment of the Philippine chapter of the American Red Cross in time of public calamities, providing for a physical check and audit of all insular property, authorizing the transfer of female prisoners from Bilibid, providing for the deposit of "wharfage fees" for construction, improvement, and maintenance of ports, protecting the public against adulterated products and providing for standardized labeling, providing for additional public land inspectors to expedite inspection work of the bureau of lands, providing for additional assistants for the courts, bureau of justice and general land registration office, establishing seed farms for rice, corn, sugar-cane, and other staple crops, establishing stock farms, slaughterhouses, and breeding stations, promoting cooperative marketing associations, regulating the practice of surveying, appropriating ₱500,000 for new classes in primary education, and increasing the power of the municipal board of Manila to fix license fees on business.

EX OFFICIO APPOINTMENTS

In all cases in which the legislature designated members of a committee or board (which I regarded as the attempted performance of an executive act, and therefore unconstitutional and void under the decision in the recent board of control cases), the members of such committees and boards have been appointed without regard to the provisions contained in the laws as to the persons who were to be placed in these positions.

In one case where the only amendment to an existing law consisted in a provision that the three members of a board should be chosen from three insular bureaus, the bill was disapproved as an attempted encroachment upon the powers of the executive.

SENATE ACTION ON APPOINTMENTS

The senate rejected appointments of 4 justices of the peace and failed to take action on the appointments of 8 judges of the court of first instance, 6 provincial fiscals, 1 provincial governor, and 1 provincial treasurer, as well as a number of justices of the peace, and one or two other minor appointments.

The judges, provincial fiscals, the provincial governor, and provincial treasurer were immediately reappointed, *ad interim*, as soon as notification was received from the legislature that no action had been taken on their appointments. This list included three judges whose appointments date back to the administration of former Governor General Wood. They are: Hon. James C. Vickers, Ricardo Summers, and Antonio M. Opisso.

This procedure, ignoring these appointments by the senate and their reappointment after the close of the session, has been followed since their original appointment with the exception of last year, when the senate rejected the appointment of Judge Opisso, who was thereupon reappointed by former Governor Stimson. The list also includes an American provincial governor, James R. Fugate, who was appointed Provincial Governor of Sulu by Governor General Stimson.

THE GENERAL ECONOMIC SITUATION

For the people in general, as well as the government, the year was on the whole a very satisfactory one. Peace and order were excellent, and, with the exception of two typhoons which swept through some of the southern islands, the country was free of major disasters. Health conditions were very favorable. While prices of staple crops were low, their volume was larger than ever before. This prosperous condition of the country was reflected all along the line in increased revenues of the government. A typical example of this is the fact that internal-revenue collections increased over ₱2,500,000, or about 4½ per cent. There was unmistakable evidence, however, towards the end of the year that continued low prices were slowing up the business situation and competent observers expect that the revenues of the government will be diminished for the year 1930 and business in general will be somewhat poorer during the first part of the year. This causes no undue alarm, however, as the government is in a very sound position financially, the budget having been drawn in such a way for the past several years that a cash balance has resulted.

The legislature and financial officers of the government are fully cognizant of the situation and realize the necessity of cutting government expenditures to the minimum and curtailing all unnecessary development.

In so far as the business community is concerned, most firms have been conservatively managed and are well able to withstand a temporary depression.

ADMINISTRATIVE INVESTIGATIONS

Rumors of serious irregularities in the bureau of commerce and industry and the bureau of posts caused the secretary of commerce and communications to appoint committees to investigate these bureaus during the year. The investigation of the bureau of com-

merce and industry was terminated shortly before my arrival and the report of the committee revealed serious incompetency and dishonesty among ranking officials of the bureau. As a result of the investigation, the director resigned and the assistant director, the superintendent of the marine railway and repair shops, the chief of the navigation and lighthouse division, the chief accountant, the storekeeper, the medical inspector, and other minor officials and employees were dismissed or otherwise removed from the service.

The investigation of the bureau of posts which was started on May 11 revealed serious irregularities, the most serious of which was the theft of stamps amounting to a very large sum. Several officials were dismissed and were being prosecuted before the end of the year, but the investigation had not been officially closed.

These investigations received wide publicity throughout the year and aside from the beneficial effects which are expected to result in the bureaus themselves they are of great value in promoting greater zeal and efficiency in other government organizations and most of all in arousing toward the conduct of the government a vocal and critical public opinion.

The reports of the department secretaries which are attached as appenda to this report give full details of the operation of the government, but the following mention is made of matters which are of general interest.

THE DEPARTMENT OF PUBLIC INSTRUCTION

The Hon. E. A. Gilmore, vice governor general and secretary of this department acted as Governor General from February 23, 1929 to July 8, 1929 during which time the department was in charge of Dr. Alejandro Albert, the undersecretary. Governor Gilmore left for the United States on November 23 in the interest of educational and health work in the Philippines.

BUREAU OF EDUCATION

The bureau of education has given special attention in recent years to educational research, vocational education, and health education. The first of these was given added impetus during the year by a gift of ₱320,000 from the international board of education for the promotion of research work and the promise by them of added positions for specialists in education and additional funds for research.

Increasing interest in vocational education has been evident since the passage of the vocational education act in 1927, but the problem is still far from solution. The department was fortunate in being able to make arrangements for Dr. C. A. Prosser to come to the islands early in 1930 and make a thorough survey of the situation. Doctor Prosser is nationally recognized as an authority in this field of education and his report should be of great value.

Miss Sally Lucas Jean, a specialist in health education, who enjoys an international reputation, was persuaded to come to the islands early in the year for a survey of this field of education. Under her guidance a comprehensive program was worked out, which is now being put into effect under competent supervision.

There was an increase in the total enrollment of approximately 50,000 pupils, made possible by an appropriation of ₱700,000 for

school extension, which permitted the organization of slightly over 1,000 new classes.

While the enrollment in the public schools gradually increases, the school population increases at practically the same rate and the schools are able to provide accommodations for but little over one-third of the children of school age. Expenditures for public schools are increasing from year to year, however, including total expenditure, as well as per capita and per pupil expenditure.

The insular government spends proportionately a much larger share of its revenue for school purposes than the provincial governments. Legislation providing fixed sources of provincial revenue for schools is badly needed.

PRIVATE SCHOOLS

Private schools provide for a considerable number of pupils who can not be accommodated in the government schools. The number of these schools and their enrollment is increasing rapidly and under careful government supervision standards are maintained which compare quite favorably with government schools.

HEALTH SERVICE

There were no serious outbreaks of communicable diseases during the year. There was a slight rise in the general death rate throughout the islands not due to any specific cause. The estimated rate was 22.18 for 1,000, which was two points higher than 1928. This increase was more or less general in other countries, as shown by the League of Nations report. The marriage rate showed a slight decrease, due probably to the restrictions of the marriage law.

There was a slight increase in dysentery in the islands as a whole, this increase being most noticeable in the city of Manila, especially during the months of April, May, and June. During this period the number of cases and deaths reported became rather alarming, but did not reach epidemic importance. At that time the city was suffering from a plague of flies, which, no doubt, was a factor in the spread of the disease.

The fly nuisance was due to the presence of an excessive amount of green algae in Laguna de Bay and Pasig River, with a marked lowering of the normal water level. The decomposing algae lodged on the broad, sloping lake shore and provided an ideal breeding place for myriads of flies, which were carried to the city in all sorts of conveyances both on the river and the near-by roads.

The year's mortality rate from typhoid fever was the lowest on record from this disease. Vaccination, hospitalization, and improved water supplies have all been important factors in this reduction.

Only one case of cholera appeared in the islands during the year. This makes a 3-year period during which there has been no outbreak of this disease.

There were no cases of smallpox with the exception of an outbreak in the islands of Saragani and Balut, Province of Davao. The infection was traced to the illegal entrance of two persons from Meares Island of the Karkaralong (Dutch) group. The cases occurred in the Moro population and did not affect the Christians. In many of the Provinces inhabited by Moros, officers of the health service have great difficulty in vaccinating the people due to inherent religious

beliefs. This is being overcome to a certain extent by the employment of Moro headmen who accompany vaccinating parties and explain to the people the advantage of being protected by vaccination.

On account of the proximity of Borneo and other islands to the Moro region, there is always grave danger of smallpox being introduced and assuming epidemic proportions. Vaccination in other parts of the islands is being carried on in a systematic and thorough manner and the vast majority of the Christian population is protected.

Tuberculosis still stands first as a cause of death. Over 30,000 deaths were attributed by the director of health to this cause during the year. Tuberculosis is a serious problem in the Philippines and is basically an economic one. Improved living conditions, proper food, and adequate sanatorium care will do much to combat this condition.

Deaths from malaria have decreased 50 per cent since 1926. This disease is still the subject of extensive study, and five malarial-control units are employed in some of the heavily infested areas in addition to the activities of the local health service personnel.

There was a noticeable increase in the number of deaths due to beriberi. Efforts are being made to improve the dietary of the poorer classes as in this way beriberi may be entirely eradicated.

Leprosy is still a serious problem, as one-third of the insular appropriation of the health service is utilized in segregation and treatment of lepers. Treatment stations were opened during the year at Iloilo and in the Bicol region. A new one will soon be opened in Zamboanga, and the large station being built at Cebu by the Leonard Wood Memorial is almost complete.

Five hundred and fifty-three lepers were released on parole during the year, making a total of 2,013 released as negative since 1922. The Leonard Wood Memorial, in addition to expending ₱360,000 for the Cebu leprosarium, released ₱285,000 for use in Culion and ₱30,000 for the erection of a skin clinic in Cebu.

Two health demonstration units were established in cooperation with the school of hygiene of the University of the Philippines. One in the city of Manila and another in a near-by rural community and three rural health demonstration units were established in cooperation with the international health board. All of these units are working along lines of improvement of urban and rural sanitation. In addition the international health board appropriated ₱20,000 for the school of hygiene and also sent two professors from large medical schools in the United States to teach in this school. These professors after one year's stay are to be replaced by two others from the United States for a period of one more year.

The American Red Cross, in May, sent five health and rehabilitation units to the typhoon-devastated sections of the country. These units are still in operation and are doing excellent public-health work. The effect of their activities will lead to higher standards of living in the communities where they have operated.

Three new hospitals totaling 225 beds, one laboratory, and three public-health dispensaries have been opened during the year. Several other hospitals are now under construction, including new units for the Insular Psychopathic Hospital. There are still many communities inadequately supplied by hospital service.

BUREAU OF QUARANTINE SERVICE

Although cholera, plague, and smallpox were present in epidemic form in oriental ports adjacent to the Philippines, their transmission was prevented by effective quarantine measures and vaccination.

Early in the year reports were received of a considerable number of cases of cerebrospinal meningitis among Filipino steerage passengers on vessels which had left the Philippines en route to the United States. The number of these cases increased as colder weather was encountered on the voyage. Due to the spread of the disease in the Pacific States, the President of the United States issued an Executive order which included this disease in quarantinable diseases. All steerage passengers leaving the islands were required to undergo a two weeks' quarantine and a bacteriological examination in all cases before embarkation, and regulations were drawn up lessening the number of steerage passengers vessels might carry.

Meningitis is not a common disease in the islands and there appears to be little doubt that the cases mentioned were picked up in oriental ports by Filipinos en route to the United States who, on account of the unaccustomed cold and frequently their insufficient clothing, were peculiarly susceptible.

DEPARTMENT OF FINANCE

The report of the secretary shows that the financial position of the government is very sound. The revenues from ordinary sources amounted to ₱87,270,576.36, an increase over the previous year of nearly ₱5,000,000.

The ordinary expenditures of the government on the other hand amounted to slightly less than ₱78,000,000, a decrease of about ₱800,000, from the previous year.

The surplus at the end of the year amounted to over ₱51,000,000 of which, however, over ₱41,000,000 has already been allotted for future expenditures leaving a net unappropriated cash surplus of over ₱10,000,000.

The bonded indebtedness was increased by ₱1,400,000 during the year but the total amount of bonds outstanding is still well within the limits provided by law and sinking funds are fully maintained to cover all outstanding bonds. A study made of the finances of the government for 1929 anticipated a substantial net cash surplus, the result of accumulated savings for various years. No better use could be made of such surplus than to reduce the indebtedness of the islands. It was therefore recommended and the legislature readily approved the redemption of the Manila port works bond issued under Act 2908, not due until 1950 but redeemable in 1930. These bonds earned 5½ per cent interest per annum, the highest rate paid on Philippine bonds with the exception of the 1921 20-year 5½ per cent public improvement bonds issued under Act 2940.

The progress of the port works made it necessary to sell at the later part of the year the unissued portions of Cebu and Iloilo 4½ per cent 30-year port works bonds under Acts Nos. 3413 and 3417, respectively. Such unissued portion amounted to ₱5,350,000. Due to unfavorable conditions then prevailing in the United States bond market, as reported by the bureau of insular affairs, it was feared that said bonds could only be sold below par. Arrangement was therefore made with

the Philippine National Bank to advance funds to the government on the security of said bonds, pending a better bond market. As the bond market showed signs of improvement at the close of the year this arrangement will undoubtedly result in considerable saving for the government.

The gold standard fund amounts to 24.4 per cent of the money in circulation which is ₱11,000,000 over the minimum required by law.

GOVERNMENT-OWNED COMPANIES

The government still holds virtually all of the stock in various business enterprises. Of these the Cebu Portland Cement Co., the Manila Railroad Co., the Philippine National Bank and the Manila Hotel are all reported as having made encouraging net profits during the year.

THE PHILIPPINE NATIONAL BANK

The bank made a net profit of ₱3,265,027.37 from operations during the year which was ₱587,444.52 greater than the profit realized during 1928.

Considerable progress was made during the year in carrying out the provisions of the rehabilitation Act No. 3174 of the Philippine Legislature.

Since the approval of said act in 1924, circulating notes have been reduced from ₱32,366,160.50 to ₱13,500,000 as of December 31, 1929.

During the year 1929, ₱3,198,770.53 was paid to the government for account of the contribution which it gave the bank to wipe off doubtful and bad assets under the rehabilitation act.

During the year under review, five sugar centrals financed by the bank in Occidental Negros were able to reduce their principal indebtedness in the total sum of ₱3,488,420.50, besides payment for interest in the sum of ₱556,435.70. The total indebtedness as of December 31, 1929, was ₱28,503,489.53 as compared with ₱48,226,591.50 on October 31, 1926, which represented the maximum amount of such indebtedness. During the past two years two sugar centrals have been able to pay completely their capital indebtedness to the bank, and it is expected that another one will be able to do so in three years. The railroad company refunded to the government ₱250,000, as a partial refund of the funds advanced to pay the interest of the bonds of the company, and the hotel company retired bonds amounting to ₱100,000.

TRADE WITH THE UNITED STATES AND FOREIGN COUNTRIES

The total trade of the islands with the United States and foreign countries for the year was the largest ever recorded, the imports amounting to ₱294,000,000, an increase of 9 per cent over the previous year and the exports amounting to ₱328,000,000, an increase of slightly less than 6 per cent.

The total trade with the United States amounted to ₱434,000,000, an increase of 9 per cent over the previous year of which ₱185,000,000 represents imports, an increase of 11 per cent; and ₱248,000,000 exports, an increase of 7 per cent.

Trade between the islands and the United States has increased steadily over a long period of years, illustrating the mutual importance of the two markets.

American vessels continued to lead in the foreign carrying trade of the islands, handling imports and exports to the value of ₱278,000,000, an increase of over ₱15,000,000.

The following table shows the value of the principal imports of the islands, the percentage increase or decrease over the previous year, the amount imported from the United States, and the percentage of increase or decrease in the imports from that country.

Article	Value	Percentage of increase (+) or decrease (-) over preceding year	From the United States	Percentage of increase (+) or decrease (-) over preceding year
Cotton and its manufactures.....	₱53,953,812.00	-4	₱31,697,057.00	+3
Iron and steel and manufactures.....	43,812,331.00	+9	35,559,922.00	+12.5
Mineral oils.....	19,838,058.00	+13	16,814,381.00	+17
Automobiles, parts, and tires.....	15,271,455.00	+15	15,001,886.00	+16
Meat and dairy products.....	13,787,193.00	+3	7,341,123.00	-1
Rice.....	11,620,026.00	+138	None.....	
Wheat flour.....	10,120,155.00	-5	8,696,578.00	-6
Silk and its manufactures.....	9,328,442.00	+10	4,067,759.00	-3
Paper and its manufactures.....	8,454,247.00	+2	6,093,373.00	+9
Electric machinery.....	7,460,050.00	+71	6,279,801.00	+64

It will be seen from this table that the United States has furnished the greater part of the major imports and that the imports from the home country have more than held their own in the new business for the year.

The per capita consumption of the first five articles mentioned has increased manyfold since 1903. For example, the per capita consumption of steel, most of which has always come from the United States, has increased more than 400 per cent since 1903 and 67 per cent since 1924. The per capita consumption of cotton goods has increased by over 200 per cent since 1903; meat and dairy products, 300 per cent; wheat flour, 276 per cent; silk, 421 per cent; paper, 450 per cent; and other articles imported from the United States in similar manner. These figures are cited to illustrate the constant and growing importance of the Philippines as a market for American goods. Taking into consideration the vast undeveloped resources, the future possibilities suggested are enormous.

COAST GUARD SERVICE

The coast guard cutter service under the bureau of customs has been greatly handicapped in preventing smuggling of immigrants and material into the Philippine Islands by lack of proper coast guard cutters, there being only one coast guard cutter available for this duty. This cutter has been used in patrolling the southern waters and it leaves the entire northern end of the Archipelago without any patrol, and also the southern end without patrol when this cutter is in port and under overhaul.

The legislature of 1929 appropriated money for the building of one additional revenue cutter. Plans and specifications have been drawn and bids will be called for early in the new year and it is hoped to have this additional cutter in operation during the calendar year 1931 to assist in patrol and be available for use in assisting areas and ships damaged in typhoons.

THE DEPARTMENT OF THE INTERIOR

The report of the secretary reveals a very satisfactory condition among the provincial and municipal government entities. Local revenues from all sources increased, in spite of the fact that several Provinces were visited by most destructive typhoons late in 1928 and again in 1929.

In the regularly organized Provinces assessments of real property were increased by 8 per cent, representing an additional real-property tax of almost ₱1,000,000.

In the nine specially organized Provinces under the bureau of non-Christian tribes conditions were particularly satisfactory. Peace and order were on a par with the regularly organized Provinces. Assessment of real property was increased in these Provinces also and general revenues were increased. The policy of increasing the employment of non-Christians in these Provinces is being steadily carried forward.

There was an unusual amount of new building and public improvements both in Manila and Baguio during the year. The city of Baguio is becoming more and more popular as a vacation resort, not only for residents of the Philippines but for residents of China coast cities. His excellency, Sir Cecil Clementi, Governor of Hong Kong, visited the islands during the year and spent some time at Baguio. He was very enthusiastic over the possibilities of the city as a tourist resort.

DEPARTMENT OF COMMERCE AND COMMUNICATIONS

BUREAU OF PUBLIC WORKS

The bureau of public works disbursed over ₱16,000,000 for road and bridge work during the year. New first-class roads amounting to 380 kilometers were built, making a total of 12,640 kilometers of first, second, and third class roads in existence at the end of the year.

Some progress has been made in asphalting roads, with a very encouraging resulting decrease in the cost of maintenance. Also a small amount of concrete road has been laid.

Many important bridges and public buildings were under construction during the year. The most important of the latter was a new post-office building for Manila, which has been badly needed for many years. Work on this was originally started in 1920, but had to be suspended for lack of funds. Work is now more than half completed and it will be finished some time this year.

Work on the projected improvements of the piers at Iloilo and Cebu, for which bond issues were authorized in 1927, is nearing completion. When completed they will greatly facilitate the rapidly growing commerce of these two important ports.

Advertisement for bids has been made for the purchase of a new dredger for the port of Manila. This has been badly needed for some years, the deposit of silt being very rapid and present equipment entirely inadequate. There have been instances where large ships were unable to reach the docks on this account.

BUREAU OF POSTS

The increased prosperity of the country was evidenced by increased receipts in practically every department of the postal service. The bureau of posts laid 280 miles of gutta-percha cable during the year. Through the courtesy of the Signal Corps, United States Army, the cableship *Dellwood* was secured for transporting the cable to the islands and laying it after arrival. The work was accomplished quickly, efficiently, and with a large saving for the government. Officials of the department were much impressed with the ability of the officers and crew of the *Dellwood*.

INTERISLAND RADIO COMMUNICATION

An agreement was made with the Radio Corporation of the Philippines on August 17, 1928, to handle domestic messages from and to nine important centers. On the completion of their ninth station on May 10, 1929, a contract for one year was signed. This service, which has been highly satisfactory to the public, will terminate on May 10, 1930, but it is planned to extend it at least until the legislature has had an opportunity to express its views and either provide for taking it over by the government or extending the contract.

BUREAU OF COMMERCE AND INDUSTRY

The bureau of commerce and industry, charged with the maintenance of lighthouses and the placing of navigation aids throughout the islands, is operating two lighthouse tenders built in the year 1907.

These ships are approaching the maximum life and the amount of repairs and the upkeep necessary to keep them in operating condition is excessive.

The legislature of 1929 appropriated funds for the building of two lighthouse tenders to replace these old ships. Plans and specifications have been drawn for these ships and bids will be asked for early in the new year, and it is hoped to have these ships in commission and in service early in 1931.

INTERISLAND SHIPPING

Act 3418 passed in 1927, which removed interisland shipping from the jurisdiction of the public service commission, except with regard to the fixing of maximum rates, is slowly tending to improve the very unsatisfactory condition of interisland shipping. During the year nine vessels of over 1,000 tons were put into service. Unfortunately two of these vessels were lost, one being wrecked and another burned. The Robert Dollar Co. expects to put a large vessel in the interisland service some time during 1930.

THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

The report of the department secretary gives a very favorable impression of the bureaus under his charge.

Notwithstanding an unusually late rainy season, and destructive typhoons and diseases causing an estimated loss of ₱38,000,000, the total acreage planted to basic crops was increased.

DISPOSITION OF PUBLIC LANDS

Land classified and certified to the director of lands by the bureau of forestry now amounts to 35 per cent of the total land area of the islands. The lumber industry continues to increase. There are vast stands of very valuable timber in the islands which represent one of their most valuable resources.

The greatest problem confronting the government is some means of speeding up the disposition of public lands. An increase in the number of homesteads approved is noted but there is still too much delay. A land title committee was appointed during the year to make a thorough study of the situation and submit recommendations. The legislature is awake to the necessity of improving matters in this respect and will undoubtedly give careful consideration to any suggested reforms.

The production of gold is becoming an appreciable factor in the islands' business. Several of the older companies are in a very prosperous condition and considerable new development is taking place.

PINEAPPLE CULTIVATION IN BUKIDNON

An interesting experiment is being tried out in this connection by setting aside a large area as an agricultural colony in Bukidnon and permitting a corporation organized for the cultivation of pineapples to take up a smaller area within the reservation and finance homesteaders who will settle in the colony and raise pineapples. The farmers hypothecate their land to the corporation as security for advances, but any lands foreclosed must be transferred to qualified public lands applicants within five years. This plan presents broad possibilities for the future development of wide areas of vacant agricultural land under arrangements which will provide capital without necessarily amending the present land laws.

RURAL CREDITS

The bureau of agriculture has for many years maintained an organization to supervise the administration of small cooperative rural credit associations. The system of supervision was completely reorganized during the year, resulting in a more favorable situation.

The need for extending additional credit facilities to the small farmer is well recognized. The legislature passed a joint resolution creating a rural bank commission to be composed of three members to be appointed by the Governor General to make a study of the matter and submit its report during 1930. A committee composed of the Hon. Miguel Unson, secretary of finance; Mr. Juan Posadas, jr., collector of internal revenue; and Mr. Earl B. Schwulst, vice president of the Philippine National Bank, former bank commissioner and financial adviser to the Governor General, was accordingly appointed and is now making a thorough survey of the situation.

In addition the government was fortunate in being able to secure as consulting financial expert the services of Dr. Edwin Walter Kemmerer who is internationally known as a financial adviser to various foreign governments for which he has done considerable work in installing financial and banking systems. He will advise the Philippine Government on banking, taxation and tariff matters in general, and on the above-mentioned matter of rural credits in particular.

DEPARTMENT OF JUSTICE

During the year five new judges were appointed to fill ordinary vacancies. In addition 10 auxiliary judges were appointed under the provisions of Act 3433, which created these positions for the purpose of expediting the disposition of cadastral cases.

CONGESTION IN COURTS OF FIRST INSTANCE

While the courts disposed of more cases than during the preceding year, there was an increase in the number of cases pending at the end of the year, due to increase of cases filed. This large number of pending cases is one of the most serious problems confronting the government. The appointment of the 10 judges for cadastral cases brought encouraging results in this direction as the number of such cases tried was doubled.

The number of decrees issued by the general land registration office suffered a sharp decrease.

PRISON CONDITIONS

Insular prisons continued to be greatly overcrowded, particularly Bilibid Prison in Manila. Notwithstanding this, discipline was good and the prisons were well maintained. The penal colonies at San Ramon and Iwahig are made available for prisoners from Bilibid who have established good records and they are permitted to work outdoors under minimum surveillance. There are remarkably few infractions of prison discipline and those usually of a minor nature.

Provincial jails are in general very poorly maintained, due to the fact that the warders are political appointees. Now, that provincial sheriffs have been removed from the realm of politics, the next step would appear to be to take similar action regarding jail warders. When both of these steps are carried out, many abuses will be corrected.

THE GOVERNOR GENERAL'S ADVISERS

The so-called Belo Act which was passed in 1928 authorizes the Governor General to employ technical assistants. Under its provisions several technically trained men from the Army and Navy were secured as well as a few civilian employees. These men without exception rendered very valuable service not only to the Governor General but to department and bureau officials as well. The two groups were encouraged to consult freely with each other and the resultant harmony and close cooperation was so satisfactory to all concerned that it is now generally recognized that this particular piece of legislation was a very valuable one not only for the Governor General but for other government officials as well.

CONCLUSION

In closing this report I wish to express my sincere appreciation of the unwavering loyalty to and support of the Government of the United States by the great mass of the Filipino people in general and by their representative leaders in particular. The relations both official and social between the people of the islands and myself and members of my staff could not have been more pleasant.

Very respectfully,

DWIGHT F. DAVIS,
Governor General.

APPENDIX A

INAUGURAL ADDRESS OF GOVERNOR GENERAL DWIGHT F. DAVIS

[Delivered at the Ayuntamiento upon his arrival in the Philippine Islands on the morning of July 8, 1929]

Twenty-five years ago I first visited Manila, led here by the idle curiosity of the tourist. To-day I return, not as an idle tourist but as your sincere friend, animated not by curiosity but by an earnest desire to work with you for the welfare, progress, and prosperity of the Philippine people.

You may well be proud of the material, cultural, and spiritual betterment which you have brought about in this short quarter of a century; and the people of the United States have been sincerely happy to cooperate with you in making this development possible. Toward the Philippine people, the people of the United States have but one desire: To extend to them their friendly aid in the solution of the problems of the future. That feeling is cordially shared by our great President, Herbert Hoover, who, better than any Chief Executive of recent years, understands the problems of the East.

Next week it will be my pleasure and privilege to discuss various plans and policies with that distinguished body, the Philippine Legislature. On this occasion I wish to express my very warm and sincere appreciation of the kind welcome you have accorded to me. I landed this morning among strangers; already I feel that I am among friends.

In my message to the legislature I intend to discuss the proposal, which was introduced in the United States Congress and overwhelmingly defeated in the House of Representatives, to limit the free entry of Philippine sugar into the United States. To-day I shall only say that I am strongly and unalterably opposed to this proposal.

As my immediate predecessor pertinently pointed out, the determination of the political future of the islands does not come within the province of the Governor General. However, practical problems directly affecting the foundations upon which that political future must rest, do confront us for solution. If these foundations are not strongly and firmly built, any structure of government, no matter what its character, will inevitably fail.

One of the corner stones of the foundation of any government is the honesty of its officials. Public office, it can not be repeated too often, is a public trust. Dishonesty among public servants must be fearlessly suppressed. If it is not detected and punished, it spreads insidiously throughout the whole service, corrupts those who condone as well as those who connive at it, and dissipates public moneys so seriously needed for essential improvements. The public official who betrays his trust is not only unfaithful to those who honor him by election or appointment to office. He is faithless to the children who must grow up without educational opportunities due to lack of revenues, to the sick who can not get hospital treatment, to the unfortunates in our eleemosynary institutions, and to all the people who benefit by public improvements vital to their welfare. The responsibility for the elimination of dishonesty from the government rests not only upon our officials but also upon the people, who themselves are the principal sufferers. If public opinion demands honesty, it will get honesty. If it condones dishonesty, it will get dishonesty. I confidently rely upon the support of the press and the public in the insistence that public officials be faithful to their trust.

Closely related to this subject is the most effective use of the available revenues. Efficient economy must be exercised in every department of the government. I assume that it is being practiced to-day. I am confident that every administrative official will cooperate to this end. If any official is unable or unwilling to do so, he should and will promptly be replaced.

Efficient economy does not mean merely the saving of pesos and centavos. It is measured in terms of increased health, more education, better living conditions for the people. Every peso wasted, or inefficiently or unnecessarily expended, deprives the people of these facilities for which they have taxed themselves. I shall rigorously insist upon "efficient economy," by which I mean a peso of service to the people for every peso of taxes taken from them.

There is one element of weakness in the present foundations which threatens the strength of the whole governmental structure. That is the lack of adequate resources to carry on the work which has started so auspiciously. Government revenues are practically stationary, while the needs and proper demands are steadily expanding. The development of educational, eleemosynary, and cultural facilities, the building of roads, waterworks, harbors, railroads, irrigation

systems, schoolhouses, and other important public improvements too numerous to mention, the cultivation of all the elements vital to modern civilization, these essential governmental activities require constantly increasing revenues. Taxes probably can not be materially raised. A steady increase in the wealth of the people, which in turn will steadily increase the revenues of the government, is essential. How this can best be brought about is one of the pressing problems confronting the legislature. Economic and industrial development is thus one of the corner stones in the foundation upon which our governmental and political future will rest. I am confident that the Filipino people have the intelligence, the ability, and the courage to build that foundation so strong and secure that it will safely sustain any structure, social, industrial, or political, that the future may build upon it.

I thank you from the bottom of my heart for the warmth of your greeting to-day. I realize that it is not a personal tribute, but is the cordial courtesy of a hospitable people to one who comes from a great nation whose only wish is their advancement. Were I merely to give expression to my personal gratification at such a cordial reception, you might well feel that I had missed the broader significance of this occasion—had failed to sense its unmistakable evidence of friendship on the part of the people of the Philippine Islands for the people of the United States. I regard this warm welcome as a happy augury of that close, cordial, constructive cooperation under the organic law which I hope will be the keynote of my administration, a cooperation with political, business, journalistic, and spiritual leaders for the sole purpose of promoting the welfare of all the people.

I am proud to follow that illustrious group of my predecessors from Governor Taft to Governor Stimson. If my administration of the high office which they have so ably filled is to maintain worthily the high standards which they have set, that result must be accomplished largely through the generous cooperation and assistance of the people living in these islands, Filipinos, Americans, Spaniards, and those of other nationalities. Your warm welcome to-day is an inspiration and encouragement to believe that I may confidently expect that support. I am fortunate in having as my associates Vice Governor Gilmore, who has so faithfully labored for many years to promote your best interests, and the other splendid men, both Filipinos and Americans, who make up the administration. And I am happy to say that I have been assured of the cordial cooperation of many distinguished public leaders, whom I am glad to number among my personal friends.

A marvelous transformation has taken place in that brief quarter of a century since I first visited Manila. A beautiful city has grown up, worthy capital of these beautiful islands. The school system, the foundation upon which all future greatness must be builded, has had a wonderful growth. Health and sanitation, without which progress is impossible, have been vastly improved. Peace and good order maintain everywhere. Trade and commerce, which, rightly or wrongly, largely determine the importance of a country in the estimation of the world, are expanding. The standard of living of the people, a truer measure of real progress, is steadily improving. Transportation and communication have been facilitated by the construction of good roads, telephone, and radio facilities. The magnificent dock at which we have just landed, unsurpassed in the entire world, is an evidence of healthy commercial development. Your progress in the art of government is a credit to the intelligence, self-control, and ability of your people. Everywhere are proofs of the progress and prosperity which have marked these 25 years.

A quarter of a century, while a long period in the life of an individual, is but a moment in the life of a people. The progress which has been made, while highly commendable, is merely a start toward fulfilling the needs of the future. Much has been accomplished; far more remains to be done. Our task has just commenced. The road to our goal is long, hard, hazardous. There is no easy road to greatness, whether of an individual or of a people. Hard work, sacrifice, self-restraint, unselfish service, these are necessary elements of future progress. We can not rest content on past performances. To stand still in a rapidly advancing world is to go backwards. But by looking back on past progress, we get faith for the future.

What will the coming years bring to these lovely islands? I have a vision of that future. Perhaps it is too roseate. Yet to succeed we must set our goal high. In that vision I see the Philippine Islands as the happy home of a contented, prosperous people, spiritually, politically, and culturally leaders of the Far East, with boundless natural resources developed to enrich its inhabitants, a high standard of living for all the people not merely for the fortunate few, a model of education, sanitation, and health.

A start toward this goal has been made, but it is only a start. The goal is still very far away. If I can share with you in bringing this vision a little nearer to fulfillment, I shall rest content in the consciousness of having contributed a little to the future greatness of a splendid people.

I have but one aim, to work with you to promote the welfare, progress, and prosperity of the Philippine Islands. In that spirit I come to you. In that spirit I seek sincerely to cooperate with you in making what is now but a glorious vision into an equally glorious reality.

MANILA, July 8, 1929.

MESSAGE OF THE GOVERNOR GENERAL TO THE EIGHTH PHILIPPINE LEGISLATURE

[Delivered by his excellency in the hall of the house of representatives on July 16, 1929]

GENTLEMEN OF THE LEGISLATURE: Because I have arrived in the islands so recently, my message to you to-day will necessarily be brief and along general lines. I shall from time to time forward other messages to the legislature with specific recommendations and suggestions for your consideration.

As I said in my inaugural address, I sincerely desire to do my part in maintaining a close, cordial, and constructive cooperation with your honorable body. I agree with the farsighted view of the distinguished President of the Senate, Hon. Manuel Quezon, when he said: "It is the duty of both (branches) mutually to respect the powers and prerogatives of each and to seek through a frank and full interchange of views a common ground for action." I also agree with a similar view expressed by the eminent Speaker of the House of Representatives, Hon. Manuel Roxas: This cooperation, he said, does "not mean either renunciation or abdication by each other of fundamental principles or the surrender of powers recognized by the organic law; nor * * * absorption by one of the other, but merely helpful cooperation, thereby insuring the normal functioning of the government for the promotion of the best interests of the country."

Accordingly, I shall continue to use the Council of State established by Executive Order No. 130 of my able predecessor, ex-Governor General Stimson, as an instrumentality for friendly advisory contact between the executive and legislative branches, without in any way affecting the independence and the freedom of action of either branch. Knowing the ability, sincerity, and public spirit of the members of the legislature, I am certain that you also will do your part in maintaining this spirit of cooperation. With such cordial sentiments of good will, our mutual understanding is assured.

As you well know, there has been a determined effort recently made in the Congress of the United States to limit the importation of Philippine sugar. I am strongly opposed to this proposal. The Philippine Commission in the United States is doing very effective work in fighting against its adoption.

Many American friends, both in and out of Congress, have worked hard to insure the continuation of those trade relations with the United States to which in my opinion the Philippine Islands are justly entitled. By far the larger part of the American press ably and generously supported these efforts. The House of Representatives, after full hearings in the committee, at which ex-Governor General Stimson gave an effective exposition of the facts, registered its emphatic disapproval of the disturbance of the present trade relations between the Philippine Islands and the United States. I hope that the Senate will take a similar wise and just course.

This fight has not been without some practical advantages. It has tended to cement the union, in the common cause of the welfare of the Philippines, of all elements, Filipino and American alike, who have that cause at heart. It has also emphasized the importance of such a sound and progressive solution of the existing economic problems of these islands as may tend to insure that material prosperity which is so essential to political, industrial, and social well-being and as may also tend to give these islands, in case a similar tariff question should again arise, that additional active assistance on the part of the business interests of the United States which would be the natural result of increased reciprocal benefits that are susceptible of establishment under the existing trade relations.

However, we must not fail to heed the danger signals raised by this agitation. The wise sailor avoids the typhoon whenever he can possibly do so. With a world overproduction of certain agricultural products such as wheat and sugar; with an underproduction of other food products in the Philippines for current consumption; with an enormous demand in the United States and elsewhere for

tropical products which could profitably be raised in the Philippines; it would seem to be only enlightened self-interest to devote our energies, capital, and initiative to the development of profitable products for which there is a great demand, rather than increasing the production of products in which there is already a large oversupply. In other words, wise foresight on the part of Philippine business interests themselves would bring about a diversification of crops and a voluntary limitation of an unduly increased production of crops of which there is already a world overproduction.

Diversification of crops is universally recognized as sound agricultural policy. The periodic disastrous consequences of relying solely on one crop have been repeatedly emphasized in the experience of countries or sections of countries which have disregarded the lessons of history. Before it is too late, the Philippines may wisely avoid this danger.

Diversification is only good business judgment. The wise merchant tries to diversify the goods he sells. The careful capitalist diversifies his investments. In the same way, the successful farmer seeks to diversify his crops. He may not make quite as much money in the years when his principal crop is selling at a high price, but he often saves himself from ruin when the price falls to a low level.

Even to-day the Philippine Islands are relying on three crops for some 82 per cent of their total exports. These crops and the products thereof are all vulnerable to competition from similar and identical products from other markets. It is unmistakably apparent that if the Philippine Islands are not to continue to rely for their exports on an extremely limited variety of products, all of which are meeting increasingly strong competition abroad, the prime necessity is the development of a more diverse agriculture, bringing into production on a commercial scale many of the now neglected crops which can readily be grown in the islands and for which there are waiting markets. To mention but a few of these products, the United States alone can consume all the quinine, camphor, and coffee that the islands can produce for many years. Diversification is especially desirable in a rich agricultural country like the Philippines which, although able easily to raise ample supplies for its own needs, imported during 1928 foodstuffs to the value of over ₱54,000,000.

Not only is there need of diversification but also of a fuller development of all our resources. Such an expansion is essential if we are to carry out the public improvements so earnestly desired. The insular revenues are practically stationary, with urgent needs constantly expanding. That this vital need of increasing the revenues exists was forcefully brought out by a former secretary of the interior and senator, who is now the head of the University of the Philippines, President Rafael Palma. In a recent speech he said:

"Everybody, even the most skeptical, accepts the fact that we have mounting necessities to satisfy, that for lack of resources hygiene, elementary education, our railroads and highways, the irrigation system, the means of maritime transportation, and other elements vital to modern life, have not received the impetus that progress demands; that in the absence of local industries we import numerous articles which we can very well produce here in great abundance, such as eggs, rice, canned fruits and fishes, refined sugar, cotton, paper, silk, etc.; that our barrio lacks the attractions and incentives to retain the hands that it needs but which are forced to emigrate to other lands lured by high wages and a more decent existence; that conditions in the towns are sadly antiquated and reveal how primitive still are the ways of living of their inhabitants. We do not need to be told that we are not keeping abreast of the progress of the world, that as yet we are considerably behind other nations in industrial and scientific achievements and that even our agricultural industry proceeds under the most primitive and crude methods. This is the picture in so far as concerns our public life. Now with respect to the private life the picture is still gloomier. Very few of our people are moneyed people; the great rank and file of our citizens lead a life of abject poverty, of penury that inspires pity and commiseration. They do not have more than is necessary to supply their daily needs, the morrow is ever to them a question mark and a constant worry. To see people under nourished and poorly clad is a common sight in our barrios. Whoever would judge and grade our civilization on the social level of our peasants and laborers would form an idea not altogether complimentary to our people."

As long as these conditions exist, so long does the responsibility of the legislature to correct them exist. They can only be corrected by the expenditure of large sums of money. Increased governmental revenues are essential to the future welfare of the Philippines from every standpoint, social, educational, cultural, and moral, as well as physical, commercial, and political. I recommend this whole subject most strongly to the earnest consideration of the legislature.

How the revenues can best be increased is a complicated problem, involving other related problems, such as a careful revision of the system of taxation with a view of realizing fully and effectively our present sources of revenue and also by gradually increasing the sources from which revenue may be derived in the future. The present wealth of the country is obviously not sufficient to provide adequate taxation with which to care for even the most essential needs of to-day. The expansion must come principally through increasing the wealth of the people. Industry must be encouraged. Idle lands must be brought into cultivation. Improved lands are a valuable asset; idle lands a wasteful liability. Our enormous potential natural resources must be developed. Trade and commerce must be promoted. The government will then share in the increased prosperity of the people. Only in this way can the pressing and ever-expanding needs of the government be satisfied. Only through economic development can the government become self-sustaining and fulfill its duties to the people.

Yet there are people to whom the words "economic development" immediately raise the bogey of "exploitation." If "economic development" meant "exploitation," I should favor fighting it to the finish. I shall never favor the exploitation of the resources or the people of the Philippine Islands either by capital, labor, or politics, foreign or domestic.

But the two ideas are not at all synonymous. To develop our waste lands and create new wealth for the people and the government; to encourage industry and thus afford employment for labor; to increase the revenues and thus foster education, sanitation, and public improvements; to furnish opportunities to the great mass of the people to improve their material conditions; these things are not exploitation. They are enlightened statesmanship.

How the Philippines can achieve economic development under adequate safeguards against improper influences is a problem which demands the best thought of the legislature. Leaders of public opinion seem to realize the need for additional capital. To quote again the senate president: "No country in the world has ever been able to develop economically without the aid of outside capital, and the Philippines can not be the single exception." The United States, now one of the most powerful economic nations in the world, until very recent years developed its economic resources largely through the assistance of foreign capital. As the national wealth increased, the American people were gradually able to supply their own capital needs themselves, until to-day they are no longer borrowers, but have become lenders to other nations. Their use of foreign capital as an instrument to develop the national wealth and their encouragement of the co-operation of outside capital did not bring with them any danger of foreign exploitation of the national resources. Nor did it mean any attempt at foreign political domination.

I can find no evidence that outside capital is clamoring to enter the Philippines for the purpose of exploitation. Rather is outside capital hesitant, reluctant, unwilling. Owners of capital are usually very cautious in their investments. What they seek and properly demand are assurances of fair treatment, just laws, sound policy, and a chance to earn reasonable dividends. If they fear that they will meet with hostility, uncertainty, or unfairness they will seek other fertile fields where they will eagerly be made welcome.

The fear of foreign capitalistic domination would seem to be the unfounded nightmare of those who lack a vision of the future. They belittle the Philippine people by intimating that they have not the intelligence, the ability, and the courage to cooperate with outside capital without being controlled by it.

The economic problem here is twofold: To bring capital in and to keep labor from going out. The solution of the first will materially aid the solution of the second. Unfortunately, due to changes in the economic life and to increased needs without the means of satisfying them, our labor is emigrating to other lands. With economic development will come an increasing demand and need for Philippine labor, which to-day is promoting the prosperity of other countries rather than building up their own. It is vitally important to both the present and future prosperity of the islands that the energies of our citizens should be profitably applied here and should not, in the present stage of our economic development, be diverted to employment in building up the industries of other lands. Measures adapted to bring about the needed conservation of the islands' limited supply of labor may well receive your careful consideration. Where only 2 per cent of the 30,000,000 hectares of public domain have been taken up, where less than 12 per cent of the lands are in cultivation, with 10,000,000 hectares of potentially agricultural lands subject to settlement, where enormous natural resources are undeveloped, there would seem to be plenty of opportunities within the islands, instead of following the will-o'-the-wisp of waiting wealth in other lands.

Labor is the backbone of industrial development. Capital furnishes the life-blood. Both are necessary for a healthy growth. A sound economic life demands that capital earn reasonable dividends which in turn enables labor to be profitably employed. If labor is forced to emigrate from the country, and capital is discouraged from entering into the country, economic growth will stop.

Capital and labor, two cornerstones on which sound economic development rests, depend largely upon communication and transportation for their strength. In the Philippines splendid progress has been made upon a comprehensive system of land communication by the construction of good roads. The completion of this system should be carried out as rapidly as funds permit. But another medium of communication, of vital importance in a country consisting of thousands of islands, a natural system of highways built by nature itself, the sea, has been seriously neglected. Other countries, especially the United States, are spending enormous sums to develop their waterways. In the Philippines our laws have in some ways retarded rather than encouraged the development of interisland shipping.

Transportation is the life of trade. If its growth is stunted by restrictive laws, the growth of trade is stunted. If it is encouraged to expand, trade will expand. A sound, adequate, modern system of transportation by land, sea, and air is essential to a healthy growth of both foreign and domestic trade.

The report which was made in 1927 by the able advisory committee appointed to study this subject is illuminating. It showed that interisland shipping was utterly inadequate; that most of the ships were antiquated, unsatisfactory, inefficient, and dangerous; that there were many abuses and discriminations; and that there were inadequate provisions for the safety and comfortable convenience of passengers. Although the recent change in the law, which relieved interisland shipping from its monopolistic control and placed it on a competitive basis, is resulting in substantial improvements, many of the unsatisfactory conditions above described still exist. The committee very strongly recommended important modifications in the law regarding the replacement of tonnage operated by certain foreign-owned corporations. These modifications, with appropriate safeguards for Filipino and American interests, would result in bringing immediately into interisland shipping a considerable number of modern well-equipped vessels.

If, however, the improvements which are taking place and which, with proper encouragement, will take place in interisland shipping are to be used to the best advantage, an adequate system of ports should be developed. An advisory board on ports and harbor improvements, composed of technical and business men, was appointed last year and made a careful survey of port facilities of the archipelago. The report of this board, as well as the report of the secretary of commerce and communications, should receive your consideration. The proposal to place all wharfage fees in a special fund for the development and maintenance of insular ports is especially meritorious.

The development of interisland shipping and of ports is necessary in order that products of agriculture may reach the domestic and foreign markets expeditiously and cheaply. Agriculture is, and for many years will be, the basic industry of the islands. Every possible encouragement should be given to its sound development. The welfare of the small farmer must be our constant care. Upon his prosperity depends the prosperity of the islands. Merchants, manufacturers, transportation agencies, banks, dealers in every line of trade, share in his prosperity, suffer with him in his reverses. Upon the land and the use that is made of it, depends largely the future prosperity of the Philippine Islands.

The problem of expediting the settlement of the public domain and the prompt registration of land titles continues to be a serious one. Several proposals will be submitted for your consideration by the secretary of agriculture and natural resources. Among the more important are: Development of public lands on the sugar central principle, known as the Alunan plan; more rapid disposition of agricultural public lands through the creation of a special revolving fund for the survey, subdivision, and settlement of vacant lands, to be carried out and financed either by the government directly or in cooperation with private capital.

The secretary of agriculture and natural resources will also present bills designed to protect the forests and to provide a more effective supervision in the bureau of forestry; to encourage the development of the mineral resources of the islands by liberalizing the law governing investment in more than one mining corporation; exempting exported refractory ores from payment of wharfage taxes; the coordination and specialization of agricultural experimentation; and the promotion of the cattle-raising industry by the imposition of higher import duties.

In order to encourage agricultural, industrial, and commercial development steps should be taken to supply, preferably through private agencies and capital, the existing need of facilities for granting small loans to worthy individuals of limited means and business enterprises of narrow scope, at fair rates of interest and under reasonable conditions. There should also be a thorough revision of the present laws governing rural credit associations so as to bring them under adequate supervision and control and make them function according to their original purpose. A bank devoted exclusively to agricultural loans and designed to supplement the work of the rural credit associations is another agency needed to encourage agricultural development.

An educated public opinion is essential to the success of a democratic form of government. With about 65 per cent of our children of school age unable to obtain even the most elementary education due to the lack of school revenues, the development of an informed public opinion is difficult of attainment. The keen desire of our Filipino youth for education, always the object of commendatory comment by trained observers, should be gratified as rapidly as funds will permit.

Through the generous appropriations of previous years an excellent system of public schools is now in operation. The large appropriation made at the last session of the legislature in further aid of elementary education has been most beneficial. Gradually school facilities are being extended, and as rapidly as the income of the government will warrant further extension should be made. The first obligation of the public school system is to overcome illiteracy and provide the individual a sufficient knowledge to enable him to meet adequately his own personal needs and discharge properly his social obligations. In keeping with this principle, primary and intermediate education should have first claim on available government funds. Secondary and higher education, while important, should not be promoted at the expense of basic training essential for all children. Above the elementary grades preference should be given to vocational, industrial, and agricultural education. It is gratifying to learn that this principle found recognition two years ago in a liberal appropriation for the promotion of vocational education. This has done much to stimulate and develop the excellent vocational work which the public schools have been doing for many years. Further encouragement and financial support are needed. We should continue to adjust the educational program so that those who are educated at public expense will be economically efficient. Purely academic education should be supported more and more by those who seek it.

Another principle should be recognized: That the purpose of education is to develop not merely the mind but the body. The recent increased interest in health education is commendable. It is hoped that this phase of education will be given generous consideration.

Approximately two-thirds of the financial support of the public-school system comes from the insular government, the rest being provided by the Provinces and municipalities. It is believed that there should be a gradual increase in the proportion which is carried by the local entities. In order to enable the Provinces and municipalities to do so, there have been proposed from time to time certain bills authorizing additional local taxation, such as an increase in the land tax, an increase in the cedula tax, and the creation of a provincial school fund. Serious consideration of these proposals is desirable.

The importance of wholesome recreation in education should not be overlooked. Aside from the physical value, sport has an educational as well as a moral influence. Some lessons can be taught better on the playground than in the school. Fair play, respect for others, self-sacrifice, square dealing, honesty, ability to work with others, these fundamental qualities are developed by recreation. Juvenile crime is lessened by properly supervised playgrounds. When the more pressing needs are cared for, our municipalities may well foster the development of their recreational systems.

The ability of a country to advance in civilization is largely influenced by the health of its people. Diseases, epidemics, and bad sanitation directly affect progress and prosperity. The evil effects of undernourishment particularly are often not recognized. Preventive measures are more important than curative, although both are necessary.

The achievements in public health and sanitation in the Philippines are well known. There is no more important field of government activity. It should continue to receive liberal support. It is gratifying to know that special attention is being given to the thorough training of public health officers by means of the recently established school of public health and hygiene. The islands are fortunate in that the international health board has taken an interest in this work and has contributed so generously to its support. On the curative side,

very satisfactory progress has been made in the establishment of a system of provincial hospitals. This work should go on. Several years ago the legislature inaugurated a plan for an adequate institution for the care of the insane. The new psychopathic hospital at Mandaloyon is the result. Several additional buildings should be supplied before the institution is complete.

We may take pride in the fact that the Philippines lead the world in the treatment of leprosy. With the Leonard Wood memorial fund for the eradication of leprosy, amounting to more than ₱2,000,000, we should be able to realize still greater achievements. A new leprosy hospital located near Manila is necessary in order to do away with the very unsatisfactory conditions, due to over-crowding and inadequate facilities, prevailing at San Lazaro and to provide an adequate station for the care and treatment of lepers in this part of the archipelago.

Other diseases taking a heavy annual toll of human life and seriously impairing the vitality of thousands are tuberculosis, malaria, and beriberi. The special activities being carried on with respect to these diseases should be continued and adequately supported.

The quarantine service of the Philippines is one of the most effective in the Far East and deserves credit for having protected the islands from an invasion of any of the highly communicable diseases which afflict this part of the world. There is great need of an adequate detention station at Mariveles in order that the service may be prepared to handle any emergency.

A balanced budget is the keystone of good government. If expenditures habitually exceed revenues, that keystone will fall, and with it a good government will fall. The Philippine government to-day is on a sound financial basis. We must be willing to make any sacrifices necessary to keep it on a sound basis.

The government finances are in good condition and the budget is made under a strictly cash basis. The integrity of our credit must be retained, regardless of what desirable improvements must be eliminated from the budget. I can not agree to any material increase in the total amount fixed in the budget.

There is nothing at present to indicate that the revenue collections will increase next year. The average annual revenue for the last 10 years, including receipts from the currency reserve fund which by its nature are special and not expected to recur, is ₱76,834,000; the annual average for the last five years is ₱78,863,000; and the annual average for the last three years is ₱80,366,000. Therefore, in the absence of any sure indication of probable increase in collections, it is believed that the estimated income of ₱80,100,000 for 1930 is the safe limit for the budget. Of this amount the sum of ₱2,500,000 is proposed to be set aside exclusively for port works, and the balance of ₱77,600,000 for general expenditures.

The budget general fund revenues for 1928 were ₱85,214,000, an increase of ₱7,486,000 over 1927. This increase is mainly due to the first payment of ₱2,853,000 made by the Philippine National Bank on account of the government's fixed deposits with said bank which were canceled in accordance with the provisions of the Philippine national bank rehabilitation act, No. 3174, to the greater collection in import duties due to the heavier importation of rice and textiles, in income tax and in excise tax where kerosene and distilled spirits figured prominently. The budget general fund expenditures for 1928 were ₱79,626,000 as compared with ₱74,346,000 for 1927, or an increase of ₱5,280,000. This increase is chiefly explained by the purchase of Manila Railroad Co. stock in the sum of ₱1,000,000 under Act No. 3116, and by the larger amounts expended for public works, postal service, and aid to local governments.

The prevailing low prices of our principal products, coupled with the devastations of hemp and coconut plantations caused by the typhoons in the month of November of last year and in the month of May of this year will undoubtedly diminish the purchasing power of the country and this will be reflected in the government revenues. It is, therefore, reasonable to expect that there will be a general decline in the import duties, income tax, and sales tax. Moreover, the Philippine National Bank will not be able to pay to the government, on account of the fixed deposits canceled, as much this year as it paid last year. Consequently, after a thorough consideration of the various items of the budget general funds revenues, the same were estimated at ₱80,362,000 for 1929, or ₱4,852,000 less than the revenues collected in 1928. The total appropriations authorized for 1929 amount to ₱80,207,000, an increase of ₱581,000 over the expenditures in 1928 and ₱155,000 less than the estimated revenues for 1929.

The cash surplus at the close of 1928 was ₱13,179,000. Following sound finance principles, it is recommended that this surplus be reserved for the following purposes: (a) To redeem during 1930 the 5½ per cent Manila port works bonds amounting to ₱12,000,000. These bonds were issued in 1920 and are payable in

30 years but redeemable after 10 years. As the rate of interest earned by these bonds is the highest paid by the Philippine Government (usual interest is 4½ per cent), it is only sound business policy that the same be redeemed promptly. This will also reduce the annual interest charges and will permit the amount saved to be devoted to public improvements hereafter. (b) To provide for the revolving fund authorized to the amount of ₱5,000,000 for the construction of permanent bridges under Act No. 3500. In accordance with the provisions of this act, tolls must be charged on these bridges until the cost and interests thereon are fully covered. The tolls collected are to be paid into the revolving fund and may be expended for the construction of other permanent bridges. By the provisions of said Act 3500 the appropriation of ₱5,000,000 may be made available in whole or in part at the discretion of the Governor General and consequently the entire sum may be gradually completed as future surpluses may permit.

With regard to public works, the budget contemplates approximately ₱7,500,000 for general public works and ₱2,500,000 for port works. This proposal of approximately ₱10,000,000 is in keeping with that of last year and is believed to be liberal. In considering the amount to be spent for public works it is well to note the progress which has been made during the past five years. In 1924 the total expenditures of all kinds for the construction of public works was approximately ₱12,000,000. In 1928 it was ₱26,000,000. This represents an increase of more than 100 per cent. Considering the slight increase which has been realized in general government revenues, it would seem that public works have received a very generous share of our income. The total of all expenditures for public works during the past five years reaches the enormous sum of approximately ₱94,000,000. To this should be added the cost of maintenance and repairs of public works which during the same period amounts to over ₱48,000,000. We must realize that with the construction of new public works the annual maintenance charge will necessarily increase and will become a fixed liability against the operation account.

Important changes in the banking laws were enacted at the last session. At that time it was recognized that a revision of the various provisions of the law relating to banks and trust companies should be made. This revision has been prepared and will be submitted for your consideration by the secretary of finance. Many of the suggested changes are of minor character and are submitted for the purpose of clarifying the existing law. Others, however, are important changes and merit careful consideration. This revision will afford additional protection to the public, to the depositors, and to the stockholders, while liberalizing in some respects the powers of these institutions under adequate safeguards.

Frequent complaint is heard concerning the character of the tax laws and the method of collecting taxes. The main complaint has been against the sales tax. This matter has received much consideration in recent years, and valuable reports prepared by the secretary of finance and the collector of internal revenue are available. The various commercial organizations as well as representatives of the important commercial houses have submitted extensive memoranda. It is believed that this subject is so important to the industrial and business interests of the country that the legislature should begin its serious consideration very early in the session.

Important changes were made in the corporation laws at the last session of the legislature. Another bill, prepared by a joint committee of the local bar associations, was also under consideration in connection with the amendments of the corporation laws, but due to lack of time was not pressed for serious consideration. This bill is modeled on the uniform corporation law of the United States and is designed to facilitate the merger or consolidation of corporations. The present procedure for accomplishing this is cumbersome and difficult to follow.

A fair, impartial, and independent judiciary must be maintained. If justice is not equal to the poor as well as to the rich, to the most humble as well as to the most powerful, then justice becomes but a mockery. Judicial officers, from the justice of the peace to the chief justice of the supreme court, are protectors of the rights and freedom of the people.

Bills designed to improve the administration of justice have been presented in previous years. Similar proposals will be submitted by the secretary of justice for your consideration. Among the more important proposals are: Relief for the supreme court in the handling of the large number of appeal cases by the appointment of additional judges or the creation of a court of appeals; transferring the functions of the sheriff from the provincial governor to a special officer appointed by the secretary of justice on recommendation of the proper judge of first instance; amendments to the marriage laws; authorizing the transfer of

Bilibid Prison, the disposition of San Ramon Penal Farm, and the establishment of other penal farms.

The problem of an efficient control of immigration and the administration of the laws governing the same is a serious and complicated one. The secretary of finance will present for your consideration bills designed to secure more effective administration of the immigration laws. There is an imperative need for an adequate detention station for immigrants.

Gratifying progress has been made in beautifying the city of Manila and in providing for essential public works. This has been made possible by the law authorizing the issue by the city of two bond issues: One of ₱1,000,000 for filling of the lowlands, and the other of ₱10,000,000 for the erection of needed public buildings, and bridges, and for street improvements. Inasmuch as street improvements largely benefit the owners of abutting real estate, the secretary of the interior recommends that the law should be so amended as to require special assessment against such property of not less than 60 per cent of the cost of the improvements.

I have called to your attention many subjects which in my opinion merit your earnest consideration and which need wise constructive legislation. I have no specific legislative program to urge upon you. Every executive official will cheerfully give you any assistance you may desire in carrying out your important duties. We are united in seeking but one end, the welfare of all the people.

In conclusion, I can only reiterate my sincere expressions of good will, my earnest desire to cooperate with the legislature. This is not merely an oratorical gesture. It comes from the heart. Our problems can not be solved by oratory. As President Coolidge once said, "Government is a practical business which depends largely for its success on sound common sense rather than high-sounding phrases." The problems we must meet are essentially practical. Upon the practical way in which we meet them depends the future welfare of millions of people. Words can not solve them. As the great patriot Rizal said: "Too many words, too little work." Action—sound, wise, and farsighted, is necessary. I have every confidence in the ability and the vision of the legislature to solve these problems. In their solution, I offer you again my close, cordial, constructive cooperation.

DWIGHT F. DAVIS,
Governor General.

The PHILIPPINE LEGISLATURE, *Manila, P. I.*

27321—31—3

ANNUAL REPORT OF THE SECRETARY OF THE INTERIOR

DEPARTMENT OF THE INTERIOR,
Manila, March 31, 1930.

SIR: I have the honor to submit the following report of the department of the interior for the calendar year 1929:

General statement of conditions.—During the year under review, the different bureaus and offices under this department conducted their affairs in a very satisfactory manner. In the inspection trips that I made to certain Provinces and municipalities, I found the people engrossed in their respective trades and occupations, content and happy. By these inspection trips as well as by those made by the officials and employees of the executive bureau and the bureau of non-Christian tribes, harmony and efficiency in local government administration was maintained. The condition of peace and order in the islands was excellent. Provincial and municipal officials throughout the archipelago conducted themselves well. Collections from the land tax, cedula tax, municipal license taxes, and other sources of local revenue increased and this augmented the local funds available for the completion or new construction of public improvements, such as schools and other public buildings, markets, slaughterhouses, waterworks, roads and bridges, etc. On the other hand, rigid economy was observed in the item of salaries and wages for local government administration, expenses having been maintained at a low level consistent with efficiency.

Public calamities.—During the year a number of Provinces were visited by such public calamities as flood, typhoon, and fire, causing an estimated damage of about ₱21,712,980 to property. The ones that proved most destructive were the typhoons, floods, and plant pests. The havoc caused by the latter to coconut plantations can not yet be accurately estimated inasmuch as the same appeared only about the latter part of the year under review. The Provinces affected by these pests, particularly by the pest commonly known as leaf miner, were Laguna, Tayabas, and Batangas. At the time of the writing of this report, the Provinces of Albay, Cebu, Camarines Norte, Camarines Sur and Sorsogon have also been reported as being infested with the leaf miner. No effort is being spared by the governmental agencies concerned to rid the Provinces affected of this pest and it is expected that it will soon be checked and completely eradicated.

The typhoon and the flood which occurred in September, 1929, caused considerable damage to government buildings, bridges, private houses and to coconut, sugar, rice, and hemp plantations. The Provinces which were hit the hardest and which suffered the greatest amount of loss of lives and property were Albay, Bulacan, Camarines Norte, Camarines Sur, Pampanga, and Tayabas.

Legislation.—During the year several bills affecting the department of the interior were enacted by the Philippine Legislature and approved by the Governor General. Those considered the most important are the following:

Act No. 3532: Amending Act No. 3355, creating a special loan fund in the amount of ₱3,500,000 for Provinces, municipalities and chartered cities for the construction of permanent public improvements and for cadastral surveys.

Act No. 3535: Amending section 79 (c) of the Administrative Code by giving department secretaries concurrent jurisdiction with the Governor General in ordering investigations of officials and employees under their jurisdiction.

Act No. 3536: Extending the course on pharmacy from three to four years.

Act No. 3537: Dividing the Province of Misamis into two distinct Provinces to be known as Oriental Misamis and Occidental Misamis.

Act No. 3538: Extending the course on dentistry from three to four years.

Act No. 3540: Creating a committee of five members to study ways and means for the development of Mindanao and Sulu.

Act No. 3558: Creating the position of assistant provincial treasurer.

Act No. 3559: Providing for the release of minor delinquents after serving probation sentence with good conduct.

Act No. 3562: Authorizing the city of Manila to impose license tax upon the privilege of fishing in the city waters.

Act No. 3563: Increasing the term of office of the members of the board of tax appeals and providing for ample time for the presentation of assessment appeals.

Act No. 3567: Amending section 397 of the Administrative Code as amended by Act No. 3387, defining the share of the municipal, provincial, and insular government in election expenses.

Act No. 3588: Amending section 63 of the Administrative Code of the department of Mindanao and Sulu providing for the payment of graduated penalties in cases of delinquency in the payment of the real-property tax.

Act No. 3589: Creating a municipal permanent public improvement fund for the municipalities.

Act No. 3591: Increasing the sources of the constabulary pension and retirement fund.

Act No. 3593: Fixing a minimum discretionary levy on special assessments in the city of Manila.

Act No. 3598: Creating the position of provincial sheriff in the city of Manila and in the different Provinces in the islands.

Act No. 3601: Authorizing Provinces to incur overdrafts under certain conditions and limitations.

Act No. 3602: Appropriating the sum of ₱97,000 for the construction of the Andres Bonifacio monument.

Act No. 3609: Prohibiting foreigners to practice medicine in the Philippine Islands unless the country of which they are citizens grants to Filipino citizens residing therein a similar privilege.

Act No. 3617: Reorganizing and increasing the representative districts of the Province of Albay.

Act No. 3620: Amending section 846 of the Administrative Code by increasing the additional pay of constabulary officers on account of length of service from 40 to 50 per cent.

Act No. 3625: Making obligatory the translation of municipal ordinances into the native dialect.

Act No. 3631: Providing for the expenditure of a portion of the proceeds of the cedula tax for the exclusive use of various isolated places for school and local roads.

Act No. 3669: Providing for additional sources of revenue for the city of Manila.

The following is a brief review of the most important activities and outstanding accomplishments of the bureaus and offices under the jurisdiction of this department:

EXECUTIVE BUREAU

Organization and personnel.—There was no change in the organization and functions of this bureau. The most important changes in the personnel were the resignation of the chief, Mr. Vicente del Rosario, effective November 11, 1929, and the designation of the assistant chief, Eulalio Suaco, as acting chief of the bureau. To date, Mr. Suaco continues to act in this capacity. The other changes in the personnel were of minor importance.

Territorial jurisdiction.—No new Province was created in 1929. By Act No. 3537 the former Province of Misamis was divided into Oriental Misamis and Occidental Misamis but the division did not go into effect until January 1, 1930. Five new municipalities were created by executive orders during the year, namely: Kinogitan and Lopez-Jaena, Misamis; General Luna, Surigao; General Luna and Perez, Tayabas. Two other new municipalities were created in 1929, but their organization did not take effect until 1930. They are Delgado, Province of Leyte; and Regidor, Province of Misamis. Two new barrios (Cayakay, Mabini, Bohol; and Hagdan, Santa Fe, Cebu), were created effective January 1, 1930. There were on December 31, 1929, under the jurisdiction of the executive bureau, 37 regular Provinces, 2 special Provinces, 875 municipalities, 70 municipal districts, and about 13,657 barrios.

As a result of increased revenues, a general reclassification of Provinces and municipalities, effective January 1, 1929, was ordered by this department upon the recommendation of the executive bureau. Of the 19 Provinces reclassified, 9 were raised to first class, 4 to second class, 2 to third class and 4 to fourth class. Of the 139 municipalities reclassified, 136 were raised and 3 reduced in class.

Boundary disputes.—A total of 47 boundary disputes were considered and investigated by the executive bureau during 1929, of which 9 were decided by this

department in accordance with the recommendations of that bureau under section 2167 of the Administrative Code; 3 were amicably settled by the parties concerned; 13 were referred to the provincial boards concerned either for amicable settlement or for investigation and decision, and 22 were still pending investigation by the bureau at the end of the year.

Assessments.—During the year under review 48 municipalities and 3 municipal districts had undertaken a general revision of assessments. In the rest of the municipalities the assessment work consisted in the correction of erroneous assessments, the declaration of new improvements, and the consideration of individual appeals from alleged excessive assessments. There was noted a marked decrease in the number of appeals from schedules of real property values and alleged excessive assessments. The total assessed value of taxable property on December 31, 1929, was ₱1,482,876,427, compared with ₱1,376,684,040 in 1928, or an increase of ₱106,192,387 or 8 per cent. This increase represents an additional real property tax of ₱929,183,37. The total assessed value of property exempt from taxation was ₱226,906,277 in 1929, as against ₱214,097,637 in 1928, or an increase of ₱12,808,640.

Revenues.—Notwithstanding the economic depression suffered by some of the provinces on account of public calamities, revenue collections in the Provinces and municipalities increased. This was due to the systematic and intensive collection campaigns. The total revenues collected by the provincial and municipal treasurers in all the Provinces under the jurisdiction of this bureau accruing to the insular, provincial, and municipal governments, amounted to ₱43,275,033.35 in 1929, compared with ₱42,389,400.40 collected in 1928, or an increase of ₱885,632.95 or 2 per cent. There was increased collection from almost all local sources of revenue, such as the land tax, cedula tax, municipal license taxes, market and slaughterhouse fees and operation of fisheries and public utilities. A detailed statement of collection by sources as well as the distribution thereof is contained in the report of the chief of the executive bureau. Of the 50 petitions for the extension of the period of land-tax payment without penalty, 53 petitions for the remission of the land taxes and penalties, and 4 petitions for the suspension of the effects of new revised assessments received in 1929, only those coming from the Provinces of Albay, Masbate, Sorsogon, Samar, Leyte, and Camarines Norte were found meritorious. These provinces were the heaviest sufferers from the effects of the typhoons which occurred in 1928 and 1929. In the first five named Provinces the governor general, upon the recommendation of this department and of the executive bureau, extended the period of land-tax payment without penalty to August 31, 1929, and in the last-named Province, remitted the penalty due on unpaid real property taxes if paid on or before December 31, 1929. The rest of the petitions were denied. There were also disposed of during the year a total of 24,456 parcels of forfeited properties valued at ₱6,768,692.40, leaving at the end of the year a balance of 30,617 parcels, valued at ₱8,503,036, undisposed of.

Financing of local public improvements.—As usual, in addition to local appropriations, Provinces and municipalities had to secure insular loans, raise voluntary contributions and issue bonds for the financing of public improvements. During the year 1929 a total of 213 loan applications amounting to ₱4,601,610 coming from the Provinces and municipalities were received and considered by the executive bureau as against 89 loan applications amounting to ₱1,933,618 received and considered in 1928, registering an increase of 124 applications amounting to ₱2,667,992 in favor of 1929; 46 of these 213 applications amounting to ₱1,252,700 were made to the insular government and 167 amounting to ₱3,348,910 were made to the postal savings bank. Most of these loan applications were for markets and slaughterhouses, waterworks systems, provincial and municipal buildings, and school buildings. Of these 213 applications a total of 86 applications amounting to ₱1,884,100 were recommended for approval. In the same year, 2 bond issues were authorized by Acts Nos. 3525 and 3603 for the Provinces of Masbate and Samar, respectively, for waterworks and other public improvements.

Administrative cases.—The conduct of local provincial and municipal officials was on the whole excellent. They adhered to the general policies laid down for municipal government administration and showed a fine spirit of cooperation. Very few cases of abuse of authority, gambling, and malversation of public funds were brought to the attention of the executive bureau and many of these cases were found, after investigation, to be groundless or not supported by the evidence. Most of the charges were for minor irregularities in office, such as neglect of duty, violation of civil service and other administrative regulations. During the year under review, 383 complaints against provincial and municipal

officials and employees were received, compared with 482 complaints received in 1928, or a decrease of 100 complaints or about 20 per cent. The nature and the disposition of these administrative cases are given in detail in the annual report of the executive bureau. Of the several special investigations conducted by the personnel of the executive bureau may be mentioned the case against Gov. Ramon B. Felipe of Camarines Sur for abuse of authority and that against Councilor Mateo Herrera of the city of Manila for misconduct in office. The former was suspended from office for one month and the latter was publicly reprimanded.

Special elections.—Four special elections were held in 1929, two of which were for the position of senator to fill the vacancies caused by the election of Hon. Camilo Osias as Resident Commissioner in Washington, D. C., and the death of Senator Mariano Yulo; one was for the position of representative to fill the vacancy caused by the death of Representative Antero Soriano, and one was for the position of municipal president to fill the vacancy caused by the annulment of the election of Norberty Guray. These special elections were conducted in an orderly and peaceful manner.

Campaign against vices.—The campaign against gambling, prostitution, and other forms of vices was continued with renewed vigor in 1929. As a result there was noted during the year less indulgence in these vices.

Finances.—The total appropriation for this bureau for the year 1929, including insular aids for the Provinces of Batanes and Palawan, was ₱245,145.89, as against ₱263,882 for 1928. The total expenditure during the year, excluding the amounts of insular aids granted to the Provinces of Batanes and Palawan, was ₱203,632.94, as against ₱207,869.58 for 1928, showing an economy of ₱4,236.64. The income of the executive bureau during the year amounted to ₱8,047.49, as compared with ₱6,006.79 in 1928, or an increase of ₱2,040.70. The income of the bureau came chiefly from translation work for other government offices.

BUREAU OF NON-CHRISTIAN TRIBES

General statement.—The supervision and administration of the work in the government of the special Provinces of Agusan, Bukidnon, Cotabato, Davao, Lanao, Mountain Province, Nueva Vizcaya, Sulu, and Zamboanga were exercised in the most satisfactory manner. The bureau carried on its activities for the advancement of the regions inhabited by non-Christian people in the regular Provinces, such as Bataan, Mindoro, Occidental Negros, Oriental Negros, Palawan, Pampanga, Rizal, Tarlac, Tayabas, and Zambales. Other Provinces with non-Christian inhabitants, like Abra, Cagayan, Capiz, Ilocos Norte, Ilocos Sur, La Union, and Misamis, were granted insular aids for public works and sanitation. The provincial and municipal officials continued to carry out faithfully the policies of the government in relation to the attraction of the less-advanced portions of the population toward organized community life and the pursuit of peaceful and profitable occupation, principally along the line of agriculture. As a result of the long-established policy of dealing strictly with officials who abuse their authority or who exploit the non-Christians, the local officials in the special Provinces, on the whole, were honest and efficient in the performance of their duties.

A state of peace existed throughout the Provinces, municipalities, and municipal districts under the jurisdiction of the bureau of non-Christian tribes. A few crimes against persons and property were committed by certain criminally inclined individuals, but none of these were of such character as to seriously disturb public peace and order. In consequence of this gratifying condition the people were able to pursue their respective occupations peacefully and without fear of molestation.

Administrative investigations.—During the year the bureau conducted three administrative investigations. One was against Deputy Governors Eugenio Suarez and Julian Jimenez, of Sulu, and Chief Clerk Santiago C. Non, of the provincial governor's office, of the same Province. Mr. Suarez was found guilty of habitually borrowing money from different people of Sulu; Mr. Jimenez of drunkenness and willful failure to pay just debts; and Chief Clerk Santiago C. Non of habitually borrowing money from Moros and of various other misdemeanors in office. Mr. Jimenez was dismissed from the service and the transfer of Messrs. Non and Suarez from Sulu was ordered.

The second administrative investigation was against Chief of Police Amadeo Bruno, of Talacogon, Agusan, for alleged neglect in the performance of his duties. The charges against this respondent were not substantiated and he was exonerated therefrom.

The third administrative investigation was against Deputy Governor Crispin Atilano, of Zamboanga, with station at the municipal district of Margosatubig, Municipal District President Francisco Paragas, Municipal District Treasurer Felipe Atilano, Municipal District Policeman Francisco Solis, and Chief of Police Zacarias Labial, also of the municipal district of Margosatubig. These officials were accused by the Santa Clara Lumber Co. (Inc.) of neglect of duty. Final action on these charges was pending at the close of the year.

Decision was rendered in cases pending at the close of the preceding year under report. The provincial treasurer of Cotabato and his chief clerk were fined in an amount equivalent to their respective salaries of one month, and the provincial treasurer of Bukidnon, now of Lanao, was fined in an amount equivalent to 15 days of his salary.

Revenue collection and assessment.—Final figures pertaining to the revenues collected in the Provinces under this bureau are not available at this writing. Preliminary reports, however, indicate increases in revenue collections. During 1929, the cedula tax collections amounted to ₱535,499 as against ₱508,050.50 in 1928 and ₱475,199 in 1927; land tax collections amounted to ₱872,826.92 as against ₱808,270.87 in 1928 and ₱751,043.94 in 1927. The extension of assessment during 1929 brought about an increase in the valuation of real property in these nine Provinces. Below are comparative figures:

Valuation

	1927	1928	1929
Taxable.....	₱78,217,470	₱84,013,866	₱90,560,951
Exempt.....	8,553,460	8,689,944	9,051,442
Total.....	86,770,930	92,703,810	99,612,393

Parcels

	1927	1928	1929
Taxable.....	236,071	263,132	236,848
Exempt.....	63,212	64,511	50,588
Total.....	299,283	327,643	287,436

Employment of non-Christians.—The policy of the government of employing non-Christians who possess the necessary qualifications whenever it has been found possible to do so has been consistently adhered to. In 1928 there were 2,053 non-Christians employed in the government. In 1927 there were 1,674. The number of those employed in 1929 can not be ascertained at the time of the writing of this report for the reason that the data from the non-Christian Provinces regarding this matter have not yet been received.

Non-Christian scholarships.—In pursuance of the policy of preparing young non-Christians for leadership in modern community life, the bureau maintained 30 scholarship students during the school year 1929-30. In addition, there were four students who enjoyed partial scholarship, two of whom being deserving Christian natives of towns under the jurisdiction of the bureau. Most of these students are enrolled in schools giving courses in agriculture and education. The two Mohammedan special cadets of the bureau at the constabulary academy in Baguio, who were graduated the latter part of the year 1928, were commissioned in the Philippine Constabulary about the middle of the year 1929. One is now in Zamboanga and the other in Cotabato.

Non-Christian delegations.—The Sultan of Sulu, accompanied by his old technical adviser, Datu Rajamuda, were in Manila in July as guests of the government. Early in February, delegations of non-Christians came, also as guests of the government, from the Province of Agusan; Cotabato, Davao, Lanao, Sulu, and the Mountain Province in connection with the commercial and industrial fair of the Manila carnival. At different times during the year, prominent non-Christians, mostly from Lanao, visited Manila for conference with insular officials in the interest of their respective Provinces. A good number of Moro traders also came at different times bringing with them native articles

for sale in the city. They were invariably given accommodation by the bureau and were assisted in the disposition of their goods.

These visits to Manila were encouraged by the bureau as they afford excellent opportunities for the non-Christians to come into friendly contact with the more advanced people of the north and to get an insight into the social and commercial practices of the metropolis.

Finances.—Out of the appropriation of the bureau of non-Christian tribes for salaries, wages, sundry expenses, and furniture and equipment, totaling ₱79,353, all was spent with the exception of ₱3,084.90. The other items in the appropriation of the bureau of non-Christian tribes are the special appropriations which consist of cash contributions and gratuities, amounting to ₱542,400, all of which were spent or obligated with the exception of the small amount of ₱162.55. These cash contributions and gratuities consisted mostly of aids to Provinces to supplement local revenues for the financing of the provincial government administration and for public improvements.

PHILIPPINE CONSTABULARY

Activities.—The force of the constabulary was kept busy during the year operating against the recalcitrant and fanatical elements in Mindanao and Sulu, the Montescos in Iloilo, and the Negritos in Zambales and Tayabas, in addition to its regular duties of maintaining law and order, the apprehending of criminals and violators of the opium law, the gambling law, and the automobile law. It also cooperated, as in previous years, with other bureaus of the insular government, such as the executive bureau, the bureau of agriculture, the bureau of prisons, the bureau of health, etc., in quarantine work, furnishing escort and guards, maintenance of order during elections, control of local municipal police forces, etc.

The constabulary made 765 gambling raids during the year, in which 5,532 were apprehended and the amount of ₱22,157.03 confiscated; 255 opium raids involving 428 persons and the seizure of several thousand pesos worth of opium. It also captured 164 firearms, consisting of carbines, muskets, rifles, shotguns, home-made shotguns, revolvers and pistols. It recovered 193 carabaos, 34 horses and 52 cows; captured or seized ₱141,707.88 worth of other effects of crimes; made a total of 17 expeditions; 20,872 patrols covering 4,388,995 kilometers; had 9 encounters with outlaws in which 22 outlaws were killed, 2 wounded, and 29 captured. During these encounters 6 enlisted men were killed and 1 was wounded. No casualty was registered for officers.

Strength.—The actual strength of the constabulary as of December 31, 1929, was 396 officers and 5,873 enlisted men. Of the 396 officers, 20 are Americans and the rest Filipinos.

Discipline.—By systematic inspections conducted by the chief of constabulary, the district commanders, district inspectors, and provincial commanders and by summary court trials, the discipline and efficiency of the organization was maintained at a high standard. During the year, 1 officer was dismissed; 6 were required to resign; 5 were reduced in file; 32 were fined, and 30 reprimanded. Nine hundred and seventy-one enlisted men were tried by summary court, and 79 others were dishonorably discharged from the service.

Firearms.—The total number of permits and licenses issued by the chief of constabulary for revolvers, rifles, and shotguns up to and including December 31, 1929, was 42,197 as compared with 39,832 in 1928, or an increase of 2,365. Those issued in Mindanao and Sulu were 5,058 as against 4,596 in 1928, or an increase of 462. On December 31, 1929, the total number of firearms in the possession of the provincial governments consisting of carbines, rifles, revolvers, and shotguns were 1,739 as against 1,673 in 1928, or an increase of 66; those with the municipal governments were 8,003 as against 7,677 in 1928, or an increase of 326. Sixteen firearms belonging to the constabulary, the same number as in 1928, were used by the Provinces and municipalities during the year under review.

Finances.—Cost of maintenance of the Philippine Constabulary for 1929 was ₱5,143,075.93 as against ₱5,167,179.89 for 1928, or a decrease of ₱24,103.96. This decrease in expenditure was due to the decreased activities of the constabulary on account of the normal conditions of law and order throughout the islands. However, aside from the foregoing, the constabulary spent ₱126,833.43 for equipment and ₱3,000 for the printing of the revised Constabulary Manual. The income of the constabulary during the year was ₱106,248.21.

OFFICE OF THE PUBLIC WELFARE COMMISSIONER

General statement.—The main and most important functions of the office of the public-welfare commissioner; to wit, the work on maternity and child hygiene through the establishment of puericulture centers designed to reduce infant mortality; the care of the dependent, destitute, and delinquent children, and the promotion, encouragement, and coordination of all government and private charitable agencies and other institutions dedicated to the betterment of living conditions were handled in a systematic and efficient manner. No effort was spared by the office of the public-welfare commissioner in teaching the people of the advantages and necessity of clean living and of proper care of pregnant women and children. As a result, the work of the office along maternity and child hygiene made great headway during the year.

Accomplishments.—There were in all 373 puericulture centers all over the islands, 220 of which were in active operation as compared with 216 centers in operation last year. In connection with the work of these centers, the office of the public-welfare commissioner maintained midwifery schools in Manila, Bacolod, Negros Occidental, and Cebu, Cebu. The attendance in these centers was 885,584 as against 878,702 in 1928, or an increase of 6,882. About 58,000 mothers were registered in these centers during the year.

Greater attention was given by the office of the public-welfare commissioner to the care of the dependent, destitute, and delinquent children. During the year under review there were 1,987 children taken care of in the child-caring institutions at Welfareville including those in the training school for girls. Through instruction and the maintenance of a high standard of discipline, both among the probation officers and the minor delinquents, the probation work of the office was conducted in a successful manner.

Two cottages in Welfareville were completed during the year. This partly remedied the problem of proper housing of the children under the care of the public-welfare commissioner. While there is still an overcrowding in the dormitories, particularly in the training school for boys, due to the great number of commitments made by the courts, it is expected that with the progress now being made in the development plan in Welfareville, the problem of congestion will eventually be solved.

In addition to its regular functions, the office of the public welfare commissioner cooperated with other agencies dedicated to social welfare work. During the year it extended assistance to the Red Cross by sending puericulture nurses to places of disaster; to the school of hygiene and public health of the University of the Philippines by sending some of its personnel to help in operating two centers established for maternity and child-hygiene work; to the Rockefeller Foundation and the Philippine Health Service by sending a nurse supervisor to Laguna to train and supervise the work of unlicensed midwives in connection with the survey work of the former on malaria in that Province.

One important activity undertaken by the office of the public welfare commissioner during the year along maternity and child hygiene work was the opening of a nutrition class in Santa Ana Elementary School in Manila with the cooperation of the department of pediatrics of the college of medicine of the University of the Philippines.

Additional activities.—By executive order, dated June 27, 1929, his excellency, the governor general, transferred the aged people and invalids confined in San Lazaro Hospital to the office of the public welfare commissioner. By virtue of said executive order, 25 aged folks and invalids were transferred to Welfareville. At the end of the year, this number was increased to 32.

About the end of the year, the legislature passed Act No. 3579, which was approved by the governor general, authorizing the secretary of justice to order the construction on the grounds of Welfareville of such buildings as may be strictly necessary for the confinement therein of female prisoners at present confined in the Bilibid Prison, setting aside for this purpose the sum of ₱60,000. The act provides that upon completion of the buildings the women prisoners in Bilibid will be transferred thereto. Under an arrangement entered into between the public welfare commissioner and the secretary of justice which was approved by this department, the public welfare commissioner was given authority to take charge of the construction of the necessary buildings and to report directly to the secretary of justice the progress thereof and to take up such other matters as may come up in connection therewith.

Private organizations.—As in the past the government, through the office of the public welfare commissioner, gave financial assistance and technical aid to charitable institutions such as the Philippine Islands Antituberculosis Society;

Associated Charities of Manila; the Asociacion de Damas Filipinas; the Gota de Leche, and the Hospicio de San Jose de Barili. A detailed statement of the activities of these organizations is contained in the report of the public welfare commissioner.

Finances.—The office of the public welfare commissioner incurred in 1929 an expenditure amounting to ₱994,830.12, ₱421,224.51 thereof or 42.3 per cent was spent for maternity and child hygiene work; ₱433,653.57 or 43.6 per cent for the care of dependent class of children, including the maintenance of minor delinquents placed in the training schools, and ₱139,952.04, or 14.1 per cent for general welfare activities including the aid given to some charitable organizations.

PHILIPPINE GENERAL HOSPITAL

General statement.—In view of the realization on the part of the general public of the advantages of hospital treatment, the lack of sufficient accommodations continued to be a problem. On the whole, however, the work of the hospital authorities was satisfactory and efficient.

Accomplishments.—There were 108,194 patients treated in the different departments of the hospital in 1929 as against 102,547 in 1928, or an increase of 5,647. Of this number, 14,905 patients were treated in the wards, 65,295 in the free dispensary; 13,484 in the physical therapy department; 5,066 in the emergency division, 3,716 in the social service department, 3,046 in the out-obstetrical service department, and 2,682 in the consultation office. Of the 14,905 patients treated in the wards, 14,453 were discharged and 452 remained on January 1, 1930. Of the discharged patients, 6,242 were males and 8,211 were females; 10,518 recovered; 2,139 improved; 863 were unimproved; 35 were transferred to other hospitals and 898 died.

The number of births in 1929 was 2,505 as compared with 2,310 in the previous year, or an increase of 195. The rate of mortality was 6.02 per cent of the cases treated as against 5.87 per cent in 1928 and 6.39 per cent in 1927. The number of days of hospital treatment was 174,955 as against 174,105 in 1928. The maximum number of patients in the hospital was registered on May 15, 1929, when it reached 519.

In the Southern Islands Hospital the total number of patients admitted during the year was 2,659, 54 less than the admissions during the previous year. This was due to the longer stay of patients. The number of applicants who were refused admission due to lack of accommodation was 1,886 as compared with 2,505 in 1928. The total number of discharged patients was 2,658 as compared with 2,716 in 1928, or a decrease of 58 patients. The number of days spent by discharged patients was 30,097 as compared with 27,693 for 1928. The number of births increased to 70 this year. Last year it was 52. There were 2,574 operations performed during the year. Of these 398 were major and the rest minor. The free dispensary treated 14,429 patients in 1929 as against 12,883 in 1928.

Improvements.—During the year under review several important constructions were undertaken and completed. The dispensary addition consisting of two stories and occupying a ground space of 337 square meters was completed about the end of the year; the southern end of floor 12 was altered by converting the former delivery room into a pay ward for adult women and the former nursery room into a pay ward for children; a cement open platform was constructed as an addition to the soiled room where all soiled linen from the different units of the hospital are gathered; a tower for artesian well water was built to replace the old one, and the installation of the Victor X-ray apparatus of the hospital was altered to overcome its defects observed in previous years. Another deep therapy apparatus, Stabilibolt of the Simons-Reiniger-Vaifa Co., of Berlin, and a microionometer of Mallet which is used to determine the quality and amount of radiation that a patient receives in radium therapy were purchased. Minor additions and repairs to buildings and equipment were made during the year.

School of nurses.—The Philippine General Hospital School of Nursing admitted 145 students and graduated 80 in 1929. The Southern Islands Hospital admitted 20 new students and graduated 12. In 1928 it graduated 10.

Scientific papers.—As is the case every year, several members of the staff of the hospital prepared scientific papers dealing on important medical questions. These papers were given due publicity.

Finances.—The total expenditures of the Philippine General Hospital for 1929 amounted to ₱915,211.14 as against ₱898,893.80 for 1928, or an increase of ₱16,317.34. Those of the Southern Islands Hospital amounted to ₱135,644.91

as compared with ₱135,836.41 in 1928, or a decrease of ₱191.50. The earnings of the Philippine General Hospital were ₱179,607.88 in 1929 as compared with ₱165,543.14 in 1928, or an increase of ₱14,064.74. Those of the Southern Islands Hospital were ₱38,251.22 as against ₱31,523.12 in 1928, or an increase of ₱6,728.10.

The average cost per capita of patients to the Philippine General Hospital was ₱5.23 in 1929 as against ₱5.16 in the previous year. That of the Southern Islands Hospital was ₱4.51 as compared with ₱4.91 in 1928, or a decrease of ₱0.40 per capita.

BOARDS OF EXAMINERS

Registration.—During the year under review 108 physicians, 23 midwives, 161 pharmacists, 334 apprentices in pharmacy, 38 pharmacy clerks, 17 Chinese druggists, 216 dentists, 253 nurses, and 3 optometrists were registered.

According to the records of the boards of examiners, there were 2,212 physicians, 1,995 pharmacists, 1,118 dentists, 2,660 nurses, and 262 optometrists authorized to practice in the Philippine Islands as of December 31, 1929.

Miscellaneous activities.—In addition to their regular duties of giving examinations, the boards of examiners held several meetings during the year for the purpose of taking up matters pertaining to the ethical standard of the different professions and the analysis of drugs, medicines, and specifics. Administrative cases against physicians, pharmacists, dentists, and nurses for alleged malpractice and immoral conduct were also looked into by the board concerned. Most of these cases, however, were dismissed either for lack of evidence or for failure of the aggrieved parties to continue to prosecute the cases filed by them, or were settled amicably between the parties involved. One nurse was suspended for poisoning and another was warned by the board to abstain from practicing medicine. A number of cases filed against physicians, pharmacists, and dentists were still pending decision at the close of the year. Three hundred and twenty-three samples of pharmaceutical products were collected and analyzed by the board of pharmaceutical examiners and inspectors during the year under review of which 192 were declared of good concentration and the rest adulterated and misbranded. The board of pharmaceutical examiners and inspectors also approved the opening of 114 drug stores and pharmacies. As a result of the strict and close supervision exercised by the board of pharmaceutical examiners and inspectors over drug stores and pharmacies, very few violations of pharmacy laws and regulations were committed.

With the cooperation of the Philippine Constabulary the boards of examiners, as usual, conducted vigorous campaigns to rid the country of illegal practitioners in medicine, dentistry, and optometry, and as a result thereof several persons were convicted by the courts of justice.

Finances.—The income of the boards of examiners, derived mainly from examination and registration fees, amounted to ₱42,919.37 in 1929, as against ₱41,544.51 in 1928, while the expenditures amounted to ₱41,073.59 in 1929, as against ₱41,039.39 in the previous year.

CITY OF MANILA

General statement.—Harmony, cooperation, and efficiency characterized the administration of the affairs of the city of Manila under Mayor Tomas Earnshaw.

Assessment.—The total assessed valuation of taxable real estate in the city of Manila in 1929 was ₱261,356,996, as compared with ₱257,175,236 in 1928, or an increase of ₱4,181,760. The total value of exempt property was ₱134,745,724, as against ₱132,957,760 in 1928, or an increase of ₱1,787,964.

Public improvements.—The "Manila Beautiful" movement received a great impetus in 1929. Ornamental high-voltage electric lighting with underground wiring were installed along Dewey Boulevard, the New Luneta, Burgos Avenue, the Escolta, and Rizal Avenue. In addition, low, marshy lands were filled in. These and the construction of steel-concrete buildings and beautiful private residences in the business and commercial zones and in the residential districts greatly increased the esthetic appearance of the city.

In addition to the repair and improvement of streets, 42,089 square meters of new streets were added, the asphalted area of the city streets was increased by 38,401.75 square meters, 8,037.88 square meters of sidewalks, 10,230.66 lineal meters of curb, and 20,050.12 lineal meters of gutter, canal, and drainage area were constructed. In addition, 59 parcels of low lands were filled in under Act No. 3352, covering an area of 165,457.53 square meters. The Home Economics

Building at the Burgos Elementary School, an industrial shop at the Santa Ana Elementary School, and the city stockyard were constructed during the year. Other constructions in the way of making additions to and improving public buildings, such as schools and markets, were also undertaken, but these are not enumerated and listed here, as they are considered of minor importance. Three city bridges, namely, the Las Damas Bridge, the San Juan Bridge, and the Paco Bridge, were altered and improved, and important repairs to public buildings, most of which were school buildings, were made.

Law and order.—The police department performed its work during the year under review satisfactorily. It made 22,626 arrests, or 232 less than those made in 1928. The total number of criminal cases filed by the city fiscal in the municipal court was 20,391, as against 22,136 in 1928, or a decrease of 1,845. Of these, the city fiscal secured 17,271 convictions. In the court of first instance a total of 1,879 criminal cases were filed, as against 1,804 in 1928. The most common offenses and crimes committed were physical injuries, estafa, damage to property through reckless driving, insults, theft, misdemeanors, physical injuries through reckless driving, threats, and robbery.

Education.—The total enrollment in the day and night schools in the city of Manila in 1929 was 69,448, as compared with 68,826 in 1928, or an increase of 622. The total number of teachers employed by the city of Manila was 1,683, 143 of whom taught in the night schools and the rest in the day schools.

Building construction.—Seven thousand nine hundred and fifty-three building permits were issued in 1929, 1,791 of which were strong material constructions. The total value of buildings constructed under permits issued was ₱8,753,750, as against ₱6,347,963 in 1928, or an increase of ₱2,405,787.

Fire losses.—The total loss from fires which occurred in 1929 is estimated at about ₱1,356,609. This is ₱479,195 more than the loss from fires during the previous year.

Finances.—The total collections of the city in 1929 from all sources amounted to ₱7,645,104.74, as against ₱7,770,493.32 in 1928, or a decrease of ₱125,388.58. While the collections registered a decrease, the total expenditures for the city for 1929, including expenditures from continuing appropriations, likewise decreased, the same having amounted to ₱7,871,608.69 in 1929, as against ₱8,148,324.95 in 1928. The excess of expenditure over collection in 1929 was covered from the unencumbered surplus of ₱884,902.48 of the city at the end of 1928.

CITY OF BAGUIO

Assessment.—For the purpose of comparison, a comparative statement of the total assessment valuations of real estate in Baguio for the last three years are given below:

	1927	1928	1929
Total assessed value.....	₱9,453,180	₱9,973,845	₱10,633,955
Total exempt from taxation.....	6,416,205	6,573,600	6,643,500
Total subject to taxation.....	3,036,975	3,400,245	3,990,455

Finances.—The total collections made from all sources, such as general fund, the waterworks fund, and the school fund, including balances in 1928, amounted to ₱764,319.83 and the expenditures amounted to ₱613,829.79, thus leaving a balance of ₱150,490.04 at the end of the year under review. A detailed statement of the financial operations of the city of Baguio including that of the public utilities may be found in the report of the mayor.

Utilities and operations.—The utilities of the city of Baguio, consisting of the telephone system, the ice plant, the electric-light plant, the water-supply system, the market and slaughterhouse, and the pail and garbage service, made a profit of ₱147,762.05 in 1929, as compared with ₱123,984.88 in 1928, or an increase of ₱24,777.17.

Public improvements.—During the year under review, the construction of 2,888 meters of roads in different sections of the city was undertaken by the office of the city engineer; 20,497.50 square meters of city streets were paved with asphalt and 14,126.15 cubic meters of dirt were excavated. The office of the city engineer also undertook the construction of 114 meters of storm sewer and 325 meters of storm gutter; 1,504.5 meters of sanitary sewer system of various sizes of concrete pipes and placed 135 pieces of concrete-iron manholes in different places of the city. The water-supply system was extended by 5,128 meters of

galvanized-iron pipe; the street-light system by 7,446 meters; and the underground telephone cable by 2,311.3 meters. In addition, the office of the city engineer placed 11,075 meters of metallic telephone line in different sections of the city; undertook the manufacture of 17,098 pieces of various sizes of concrete pipes and post, and the crushing of 9,573 cubic meters of various sizes of quarry stones. It also kept in good condition the city parks, gardens, and cemetery, as well as 61.8 kilometers of first-class roads; 7.3 kilometers of second-class roads; and 1.8 kilometers of third-class roads.

Building construction.—One hundred and eighty-nine building permits were issued in the city of Baguio for 1929, as compared with 134 in 1928. The cost of these buildings is estimated at about ₱710,628.10, whereas the cost of those for which permits were issued in 1928 was ₱524,021.50. There was therefore a substantial increase of ₱186,606.60 in the cost of building construction in 1929 over that of the previous year.

Law and order.—During the year under review, 286 criminal cases were handled by the city attorney's office, as against 230 in 1928 and 186 in 1927. Of these, 270 were convictions, 10 cases were dismissed, 4 were acquittals, and 2 were pending at the end of the year.

The fines and fees collected by the justice of the peace in 1929 amounted to ₱4,453.80 as compared with ₱3,977 in 1928 and ₱4,293.03 in 1927.

Six hundred and eighty-two persons were arrested during the year, as against 643 in 1928; 205 animals were impounded, as against 171 in the previous year; ₱996.40 worth of articles lost during the year were recovered, as against ₱1,439.50 in 1928.

Health and sanitation.—Due to its ideal climate and to the efforts of its officials to keep it clean and sanitary, Baguio, as usual, enjoyed a healthy condition during the year under review, no epidemic of any kind having taken place.

Two hundred and eighty-nine births and 219 deaths were registered, as against 230 and 155 reported in 1928.

Baguio as vacation resort.—Baguio as a vacation resort is becoming more and more popular both to Filipinos and Americans and foreigners sojourning in the Philippine Islands. The number of visitors who went to Baguio last year (1929) totaled 28,612 as against 24,772 in the previous year. As usual, Baguio was chosen as convention city both by governmental and private entities.

METROPOLITAN WATER DISTRICT

Changes in personnel.—During the year, Mr. Abraham Gideon, chief engineer and acting manager, retired, and his services as consulting engineer were contracted for 18 months, effective after his retirement. Mr. Paul W. Mack was designated acting manager.

In general.—On the whole, the district functioned efficiently during the year under review, adhering to its long established policy of giving the public good, efficient, and economical services. All complaints brought before it on alleged excessive water bills were promptly attended to and adjusted to the satisfaction of all concerned. Excepting the destruction of the 36-inch cast-iron pipe crossing the Marquina River caused by the typhoon and floods of September 3, 1929, which will be discussed later, no other untoward incident for the district took place.

Accomplishments.—During the year, the distribution system was increased by 6 kilometers, making a total of 188.676 kilometers from 4 inches up of distribution system on December 31, 1929; 6,113.14 lineal meters of water mains were built and 2,256.77 lineal meters were under construction at the end of the year. In addition, there were also built 218.38 meters of 2-inch galvanized iron pipe at Maytubig, Pasay, and 782 meters of 2-inch galvanized iron pipe at Blumentritt, Caloocan. The district likewise undertook the building of water mains for private parties.

Six thousand three hundred and twenty-three of sewer lines (length in feet) were built during the year and 9,594.5 feet were under construction at the end of the year.

The total number of active official water services on December 31, 1929, was 24,639 as against 23,165 on December 31, 1928, or an increase of 1,474. Of these services, 14,689, or more than 64 per cent, are connected with the sewer system.

Six new fire hydrants were installed during the year but one was discontinued so that the number of fire hydrants in the city of Manila on December 31, 1929, was 808, all of which were during the year maintained constantly in good state and were ready for service at all times.

At the end of the year there were 363 public hydrants, 349 of which are located inside the city limits and the rest in Caloocan.

Every possible means was availed of by the district to reduce the per capita consumption, waste, and leakage, so as to provide for new installations every year. It is estimated that the per capita consumption has remained the same for the past few years, about 75 gallons per day.

Water supply extension.—During the year, several important projects in relation to the water supply extension program of the metropolitan water district in Novaliches, such as the construction of dikes, roads, tunnels, and filtration plant, were completed or nearing completion at the end of the year. All these projects, except one which was done by administration, were undertaken by contract with different contractors of the city of Manila.

The typhoon and flood of September 3, 1929.—On the above date the city was visited by a severe typhoon followed by a flood which destroyed and greatly damaged part of the Montalban system. After investigation, it was discovered that the 36-inch cast-iron pipe crossing the Mariquina River was destroyed, which caused a temporary cessation of the water supply in Manila and neighboring towns. As soon as the cause of the trouble was located, repair work was commenced without the least delay. All the available men in the service of the district as well as men outside were recruited and were put to work all day and all night in an effort to give the residents their daily supply of water without interruption. By September 8, 1929, the water service was restored practically to normal and on September 11, the 24-hour water service was resumed. The total cost of the repair undertaken in connection with the damages done by the typhoon and flood in question amounted to ₱135,216.40, which amount was taken from the emergency appropriation.

Finances.—The net worth of the district as of December 31, 1929, amounted to ₱11,714,416.29 as against ₱11,042,029.76 in 1928, or an increase of ₱672,386.53. The net worth of the district when it was first organized as a separate entity in 1919 amounted only to ₱3,283,411.91.

The gross income of the district during the year was ₱1,704,109.71 as against a total expenditure of ₱1,498,836.60, or a net surplus of ₱205,273.11.

PENSIONADOS

Instead of the usual 20 pensionados sent abroad yearly to pursue post-graduate studies, the Philippine Legislature authorized only five scholarships for 1929 to specialize in (1) fish canning and preservation, (2) meat canning and preservation, (3) vegetable canning and preservation, (4) manufacture of home utensils such as tableware and glassware and the like, and (5) weaving industry. After the competitive examinations held by the bureau of civil service, eligibles for these courses with the exception of course No. 5 (weaving industry) wherein no one qualified, were secured, but in view of lack of time their appointments could not be made before the end of the year. It is the plan of the pensionado committee to recommend approval of these appointments, the expenses involved to be charged to the 1930 appropriations.

Accomplishments.—With but a few exceptions, all the pensionados maintained satisfactory scholarship records during the year. Many of them secured academic degrees ranging from the bachelor's to the doctor's degree and acquired practical experience in their respective lines of work. Some of them were elected to honorary societies for excellent scholarship and scientific work. On the whole, government pensionados maintained good health and satisfactory conduct. The total number of pensionados abroad at the end of 1929 was 31 (10 partial and 21 regular).

Philippines pensionado agent.—The Philippines pensionado agent rendered satisfactory services. In addition to her regular office work, the Philippines pensionado agent visited 13 cities in the interest of government students, conferred with various university officials in connection with the work of the students, visited the latter's quarters to ascertain that their living conditions and surroundings were satisfactory, and helped and aided them in their difficulties both in their school work and otherwise. As usual, the Philippines pensionado agent also had to look after the university fellows, the special fellows, and the pensionados of the department of public instruction under Act No. 3290.

Finances.—The total amount appropriated for government scholarships for 1929 was ₱232,000. The total amount expended from the pensionado funds for 1929 was ₱173,295.08 of which ₱630.82 was expended at Manila and ₱172,664.26 at Washington, D. C. The average annual expenditure of each student in the United States and in Europe for the year under review was

₱3,649.58 as against ₱3,125.95 in 1928; ₱3,106.16 in 1927, and ₱3,065.44 in 1926. The increase of expenditure for each student registered in 1929 was due to the undertaking of special studies in the United States and in Europe by several pensionados which required the disbursements of big sums for travel, matriculation, books and instruments. Excluding the expenses of these pensionados, the average annual expenditure for each student in 1929 was ₱3,064.42.

NATURALIZATION

During the year under review, the naturalization papers of 41 foreigners were received in this department for custody in accordance with the provisions of Act No. 2927. Of these 10 were Spaniards, 9 Chinese, 5 Russians, 5 Germans, 4 Englishmen, 3 Syrians, 2 Turks, and Bulgarian, Roumanian, and Latvian 1 each.

Very respectfully,

HONORIO VENTURA,
Secretary of the Interior.

His Excellency the GOVERNOR GENERAL, *Manila.*

ANNUAL REPORT OF THE SECRETARY OF PUBLIC INSTRUCTION

DEPARTMENT OF PUBLIC INSTRUCTION,
Manila, March 10, 1930.

His Excellency, the GOVERNOR GENERAL,
Manila.

SIR: I have the honor to submit the twenty-eighth annual report of the department of public instruction for the calendar year 1929.

GENERAL STATEMENT

The organization of the department, as well as of the bureaus and offices under it, and officers of the administration, remained as follows: Department's personnel—Eugene A. Gilmore, vice governor and secretary of public instruction; and Alejandro Albert, under secretary; Luther B. Bewley and Gabriel Mañalac, director and assistant director of the bureau of education, respectively; W. G. M. Buckisch, commissioner of private education; Jacobo Fajardo, director of the Philippine health service; and R. W. Hart, chief quarantine officer for the Philippine Islands.

The secretary of public instruction, in his capacity as Vice Governor General, assumed the office of Acting Governor General on February 23, 1929, upon the resignation of Governor General Henry L. Stimson, who left on that date for the United States to take over the post of Secretary of State. The vice governor remained Acting Governor General until the arrival on July 8, 1929, of the Hon. Dwight F. Davis, who assumed the office of Governor General when he reached the islands. In the interest of educational and health work in the Philippines, the vice governor left for the United States on November 23 and the Governor General authorized the under secretary to take charge of the department. The under secretary was also taking charge of the department during the period that the vice governor was Acting Governor General.

Dr. Eusebio D. Aguilar, chief of the division of hospitals, dispensaries, and laboratories, has been acting director of the Philippine health service since August 23, vice the incumbent, Dr. Jacobo Fajardo, who, upon invitation from the international health division of the Rockefeller Foundation, left on that date for the United States with plans to make a short visit to Europe before his return to the islands. From February 28 to June 19, the commissioner of private education was also away on a trip to Europe and the United States, part of which was spent in investigating private school accrediting systems.

As heretofore, all the public schools except the University of the Philippines, were administered through the bureau of education; and all the private schools, with courses recognized or permitted to open by the government, were supervised through the office of the commissioner of private education. The University of the Philippines, as in the past, continued operation separately under the administration of the board of regents, of which the secretary of public instruction was chairman, and the president of the university and the director of education two of the other members. In the absence of the secretary from the islands beginning November 23, the under secretary has served in the capacity of acting chairman of the board.

Those in charge of the Philippine educational system have fully realized the importance of educational research. This activity was stressed upon in the Baguio conferences, the provincial institutes, and numerous teachers' meetings. The increasing realization of the important rôle research has in furthering educational progress, was in evidence when the international board of education gave the department of public instruction the sum of ₱320,000 for the promotion of research work. This realization was also evinced by the action of the Philippine Legislature, in creating five positions for specialists in the bureau of education and in granting an annual fund of ₱50,000 for the promotion of educational research, experimentation, and administration.

The program for the development of vocational education which received decided impetus when the vocational education act became a law in 1927, was

given added emphasis in 1929, with a view of satisfying the need for this type of education. Evidence that the facilities for vocational training have been on the increase, is apparent in the continuously increasing enrolment in the vocational courses. It is realized, however, that the facilities provided for vocational education are still far from sufficient. The situation apparently brings up the need for a continuously increasing appropriation for vocational schools in years to come.

Beginning 1926 when the present office of the commissioner of private education was organized, the work of codifying and clarifying existing regulations concerning standards, increasing inspection and supervision, and securing better observance of standards, had been pursued with increasing emphasis until 1928 when its completion was substantially reached. The carrying out of this work was continued in 1929, and the already much improved situation obtaining in 1928 with regard to private schools having government approval, was thereby further improved during 1929. In consequence, there was brought about in 1929, a good deal of improvement over the already improved public confidence enjoyed in 1928 by these schools.

In the field of sanitation and health the chief government activities continued operation under the two bureaus of the department, the bureaus of health and quarantine service. As usual, certain allied health service had also been performed by the Philippine general hospital, the southern islands hospital, and the public-welfare commission which are operating under the department of the interior.

In 1929 the department continued to avail itself of the services of the special advisory committees, such as the advisory committee for the control of leprosy, the advisory committee on malaria control, and the advisory committee on health and physical education. Their membership is drawn from the personnel of the respective bureaus concerned, and of the United States Army stationed in the islands. The first two of these committees were presided over by the secretary of public instruction and the third by the undersecretary. As their names indicate, they served as advisory bodies for guidance in the administration of certain health service rendered under the jurisdiction of the department. During the year, when the undersecretary was in charge of the department, he served as chairman pro tempore of the advisory committee for the control of leprosy and the advisory committee on malaria control.

The problem of improving the program of health education has been before the bureau of education for some time, but more so in recent years. In an effort to further the promotion of this program the honorable the Vice Governor General, in his capacity as secretary of public instruction, secured the services of Miss Sally Lucas Jean, one of the outstanding specialists in health education, who rightly enjoys an international reputation. As a sequel to this move the position of specialist in health education which was created in the bureau of education by recent legislation was filled by the appointment of Miss Edna A. Gerken, upon the recommendation of Miss Jean and of a committee of prominent health educators in the United States. With the guidance of Miss Jean and Miss Gerken, the health education program of the bureau of education, which is now in process of rapid development, has excellent possibilities of becoming, in time, one of the best of its kind in any school system.

The total insular appropriations for 1928 and 1929 were as follows:

Bureau or office	1928	1929	Increase (+) or decrease (-)
Department of public instruction.....	1 P107,500	2 P108,967	+ P1,467
Bureau of education ³	18,396,037	19,710,410	+1,314,373
Philippine health service.....	3,730,436	4,047,296	+316,860
Bureau of quarantine service.....	165,244	163,234	-2,010
Total.....	22,399,217	24,029,907	+1,630,690

¹ Approximately P59,000 for the office of the commissioner of private education.

² Approximately P60,000 for the office of the commissioner of private education.

³ The appropriation for public works is included in the figures reported for both years (1928 and 1929).

NOTE.—Both the 1928 and 1929 figures for the department of public instruction (including the office of the commissioner of private education) exclude the share of the department in the allotment for sundry or miscellaneous expenses which are appropriated in lump sums as common funds for all the departments of the executive branch of the government. However, the inclusion of these items will not materially change the proportion between the appropriations for the 2 years. It may be stated that the expenses of the department for the past 4 years out of such common appropriations averaged less than P8,000 per year.

The important activities of the agencies under the department are briefly discussed below. More detailed statement and statistical data will be found in the tables hereto annexed and made a part of this report.

BUREAU OF EDUCATION

Significant features of the year's work.—The chief achievement of the year was most likely the extension of educational opportunity to more than 50,000 additional children without weakening the efficiency of instruction, but the year had other encouraging features, among which the following are especially noteworthy: Improvement of the quality of instruction as indicated by tests given; decrease of 0.43 per cent in the total number of pupils dropped from school; and increase of 1.12 per cent in the number of promotions. The late closing of the books of the bureau (about the middle of the year) does not permit a comparison of the amounts of school funds from all sources, between the years 1929 and 1928. For the latter year, an increase of 4.98 per cent is shown in the annexed Table 17.

Enrollment and attendance.—The improvement of annual enrollment in the public schools which was started in 1927 and continued in 1928, was kept up in 1929, and the proportion of enrollment in these schools to the total population has been correspondingly improved. While the children enrolled in the public schools decreased from 35.57 per cent of the total school population in 1927 to 35.45 per cent of the same in 1928, those enrolled in 1929 were greater in number than those enrolled in either 1927 or 1928, they being 36.53 per cent of the total school population for 1929. The improvement will be more striking if it is considered that the percentage for 1929, 36.53 per cent, has been computed on the basis of a school population which was larger by 44,526 than that for 1928, and larger than the school population for 1927 by 88,998. This increase in enrollment appears to be largely due to the 1929 extension appropriation of P700,000 which made possible the organization during that year of 1,002 new classes and the accommodation thereby of more than 50,000 additional pupils in the public schools. If additional funds continue to be appropriated as they were for 1929, a constantly increasing enrollment of the children of school age in the public schools can be expected with much certainty.

Based on the total enrollment for the month of September, 1929, the distribution of enrollment for that year in the different grades is represented by the following percentages: Primary, 75.99; intermediate, 17.42; secondary, 6.59. The corresponding percentages for 1928 are 75.32, 18.34, and 6.34. It is shown that the percentage of enrollment for 1929 for the intermediate grades is smaller than the corresponding percentage for 1928. It is also shown, however, that the 1929 percentages of enrollment in the primary and secondary grades are higher than that of 1928. The increasing influx of students in the secondary schools is causing a financial difficulty. The resulting increase in expenses was met by two expedients—a slightly greater portion of the expense for advanced education was borne by the Provinces, and tuition was charged in secondary schools.

During the past five years or so the percentage of attendance in the primary, intermediate, and secondary schools steadily increased, thereby indicating a like improvement in the holding power of the schools. This result is largely brought about by a rather constant increase and improvement of various school facilities for effective instruction.

On the basis of the total enrollment in the secondary public, general, and vocational schools, the percentage of enrollment in the general secondary course has steadily decreased since 1925. The same may be said of the percentage of enrollment in the normal and commercial secondary courses, although the decrease in these last two courses began somewhat earlier. On the other hand, in the trade, farming, and nautical courses, and in the course in home economics, the percentage of enrollment has steadily increased during the same period.

With reference to the enrollment in all vocational courses offered in the public schools, it has increased from 7,442 in 1926 to 14,130 in 1929.

Promotion percentages.—During the three school years beginning with 1923-24, the percentage of promotions of elementary pupils had been gradually increasing. There was a halt in this tendency in 1926-27, but in 1927-28 it rose up to 83 per cent, and to 85 per cent in 1928-29. In the secondary schools, there has been a steady increase in the rate of promotions since the school year 1923-24 when it was 77 per cent, computed on the basis of the monthly enrollment for March of that year. The corresponding percentage of promotions for 1928-29 was 86 per cent.

Agricultural and industrial activities.—There were 15 agricultural schools, 18 rural high schools, and 375 settlement farm schools operating in 1929, as compared with 14 agricultural schools, 16 farm schools, and 277 settlement farm schools in 1928. On the basis of these figures it will be seen that the total increase in the number of schools of agriculture in 1928 was 101. With regard to enrollment in these schools, the grand total increased to 29,308 from 27,133 in the preceding year. In 1929 there was a slight reduction in the cultivated area, but such a setback is insignificant when we take into account that the value of agricultural production in these schools for that year was ₱431,726.19 against only ₱408,226.51 in 1928.

The per capita production in agricultural clubs was smaller in 1929 than the corresponding production for 1928. The value of industrial production also suffered a slight reduction in 1929. This reduction is due in part to the policy of shifting more and more emphasis from quantity to quality production.

Achievements in vocational education.—The achievements of the public schools in vocational education have assumed a noteworthy proportion. The present embroidery of the islands owes much to these schools to which credit may be given for the development of this household industry which has contributed materially to the family income. As a factor in the promotion of trades and crafts and in the development of agriculture the same schools have remarkable showing. To insure further and better achievement in agricultural instruction a well-trained and experienced specialist in agricultural education was recently added to the staff of the bureau. In line with the general policy of the department of public instruction to further the promotion of the program of vocational education the services of Dr. Charles A. Prosser, well-known authority on vocational and industrial education in the United States, have been secured. Doctor Prosser reached Manila in the early part of January, 1930, and will remain to give lectures at the meeting of division superintendents in Baguio in the latter part of May. During his stay he will give special attention to the trade schools.

Health education.—Health instruction has been a leading activity in the public schools. One of the most important means of carrying it out is by creating a desire and an appreciation among the pupils for hygienic living, particularly in respect to their surroundings, with a view of stimulating a like attitude in the masses. In building up this spirit, the following publications proved to be largely instrumental: School News Review, Philippine Public Schools, Food and Health, Infant Care, Tentative Guide for Health Education in the Elementary Schools, all of which were used more or less in the classrooms.

To further the promotion of health education, a conference of supervisory and administrative officials of the bureau of education, in conjunction with representatives of the Philippine Health Service, Public Welfare Commission, American Red Cross, College of Agriculture, and the Governor General's office, was held in Baguio in May under the leadership of the health adviser to the Governor General and the health specialists of the bureau. The conference was attended not only by principals, supervisors, and teachers but also by division superintendents, doctors, nurses, and university instructors. During the conference the fundamentals of a health education program were presented, special suggestions made for the further development of the work in the schools, and information on various phases of health work given. Following the conference, i. e., beginning with the school year 1929-30, the aims, ideas, and plans outlined by the conference were put into practice in the schools, especially in integrating and correlating health education with the other subjects of the curriculum.

Professionalization of teachers.—There was an increase from 10.99 per cent in 1925 to 24.99 per cent in 1929 in the Filipino teachers who are graduates of a college of education, the Philippine normal school, or the provincial normal schools. The number of elementary teachers with professional training in 1929 showed an increase of 3.58 per cent over 1928. The enrollment in normal schools and normal curricula increased from 7,332 in September, 1928, to 7,900 in September, 1929. The percentage of supervising teachers and principals who are normal school or college of education graduates was greater in 1929 than in 1928 by 2.94 per cent. In 1925 the percentage of replacement of teachers was 22.78. This gradually decreased during a period of four years until it was only 20.95 per cent in 1928, and dropped down to 16.87, the corresponding percentage for 1929. All these things show steady increase in the professionalization of teachers through giving preference to trained applicants in hiring and encouraging in-service training, and from all indications, it is safe to assume that under ordinary conditions there will be in the future a continuous tendency in the decrease of teachers' turnover.

With regard to secondary teachers taken alone by themselves, the number of those who are graduates in education was larger in 1929 than in 1928 by 269. However, the number of teachers who are liberal arts graduates decreased from 86 in 1928 to 44 in 1929. On the basis of the total number of secondary teachers, the percentage of those who are graduates in education and liberal arts was 46.49 in 1928 and 57.10 in 1929—which means an increase of 10.61 per cent in 1929 over that of 1928, and, of course, a decrease in the number of teachers of less desirable educational qualifications.

Tenure of teachers.—There was in 1929 a higher percentage of teachers of two or less years of experience than in 1928. Largely as a result of the increase of new teachers, the median years of experience of all the teachers in 1929 is lower than the corresponding median for 1928. In this case the decrease in the median length of experience of the teachers in the service is, however, not a drawback but an advantage for the schools; since, while the appointees of recent years are comparatively less experienced, they are, as a general rule, teachers of better educational and professional preparation.

Teachers of nine or more years of experience are on the increase, a condition which might have its chief explanation in the strong inducement to teachers having already a considerable length of stay in the bureau of education to continue in the service in the hope of ultimately securing retirement on a life pension, etc.

Salaries of teachers.—The average monthly salary for Filipino teachers was higher in 1928 than that in 1927, and the corresponding average for 1929 is even higher, thus showing a tendency toward better pay in the future for teachers in the bureau of education. In the school year 1928-29, there were as yet municipal elementary teachers getting a monthly salary of as low as ₱25; but they were mostly temporary teachers, and were already much reduced in number on account of the passage of the law at the end of 1927 making ₱40 the minimum salary for regular teachers in the bureau of education.

Voluntary contributions.—Chiefly on account of the persistent attempt of the Governor General and of the authorities of the schools, there has been an almost continuous tendency to minimize the collection of voluntary contributions for school purposes. Table 11 shows a steady decrease of the amount of these contributions from ₱1,455,275.84 in 1925-26 to ₱784,559.08 in 1927-28. However, the amount of voluntary contributions collected in 1928-29 was slightly larger than the collections in 1927-28.

School expenditures.—The amount of insular funds expended for school buildings in 1927 was ₱1,444,500. For 1928 the amount was ₱1,594,500, and a much larger amount—₱2,128,500—was released for the purpose in 1929. In accordance with the provisions of Act 3524 (typhoon relief act), additional insular funds in the amount of ₱118,000 were released during the calendar year 1929 for the construction of elementary-school buildings.

It will be seen from the tables herein that the governmental expenditures for school purposes are increasing from year to year, including the total expenditure, the per capita expenditure, and the expenditure per pupil. Whereas in 1924 the total expenditure was ₱24,529,540.55, the per capita, ₱2.18, and the per pupil, ₱22.07; in 1928, the total expenditure was ₱28,994,965.98, ₱2.43 per capita, and ₱26.09 per pupil. At the same time it will be seen that the total expenditure for school purposes, ₱28,994,965.98, was 18.63 per cent of the total governmental expenditures for all purposes. Furthermore, it appears that the insular government is bearing the brunt of the burden with a total of ₱18,969,097.81, or 65.42 per cent of all money spent for schools; while provincial expenditures totaled ₱4,402,545.65, or 15.18 per cent; and municipal expenditures amounted to ₱5,623,322.52, or 19.40 per cent.

The financial problem.—In the public schools, financial difficulty is undoubtedly one of the most vital and, at the same time, one of the most vexing problems. When a class or a school is organized it is presumed that funds would be available every year for its maintenance. With the assurance in the permanent supply of funds lacking, the continuance of the school or class is accordingly uncertain. When, because of lack of funds, an already existing school is closed, there is created some degree of disorganization in the system, discontent among the school patrons, and a great deal of uncertainty in the other schools. Ordinarily, a school should not be closed except for lack of attendance or lack of buildings, but it would not be possible to adhere to this rule, unless the financial support on which the whole system rests is first made secure.

School surveys.—Inasmuch as only the brightest sections in the best central schools were given the central-academic-normal tests in 1928, it was expected that the Philippine Islands medians in these tests would exceed those in the 1929

rural-vocational survey in which all sections in the grade, bright or low, were included. Nevertheless, the medians in the 1929 survey were higher.

During the year secondary semestral tests were given in first-year English, second-year general science, third-year algebra, and fourth-year Philippine history and government with a view of devising and standardizing tests covering both semesters' work in each of these secondary subjects. A recent inquiry into the work of Philippine Normal School graduates revealed that only 9 out of nearly 3,000 from 50 different divisions were given by their superintendents efficiency ratings of fair or lower; the median length of service in the bureau is around three and a half years, at least 68 per cent of them are at present in the service. The results of individual studies, tests, etc., have been announced periodically in the Philippine public schools and in memoranda.

Difficulty in the acquisition of standard school sites.—On account of the prohibitive cost of land in many places progress has been delayed in the acquisition of standard-size school sites. It is furthermore extremely difficult to secure registration of school sites under present requirements.

Operation of the teachers' pension law.—The following data furnished by the teachers' pension and investment board will give an idea of the operation of the teachers' pension law.

	1928	1929	Increase (+) or decrease (-)
Number of teachers retired	138	101	-37
Number of teachers who died without any beneficiary	4		+4
Amount collected to the credit of the pension and disability fund	₱2,348,925.14	₱2,269,325.38	- ₱79,599.76

Number of teachers retired for the period June 1, 1922, to Dec. 31, 1929, 510.

Amount collected to the credit of the teachers' pension and disability fund for the period June 1, 1922, to Dec. 31, 1929, ₱12,484,642.94.

Legislation.—Continuance of popular interest in education was shown by the granting of liberal appropriations for general operations and for the construction of school buildings. A larger amount, ₱17,424,210, was provided in the general appropriation act for 1929 as against ₱16,680,837 for 1928. It is noteworthy that an even larger appropriation, ₱18,219,260, has been provided for 1930. In the public works act the amount of ₱2,286,200 for school buildings was appropriated as against only ₱1,715,200 for 1928. The corresponding appropriation for 1930 is ₱2,779,500. Act No. 3470, which was passed during the first legislative session in 1928, provides funds in the amount of ₱275,000 to carry out the provisions of Act 3377 (the vocational education act). With the appropriation of the sum of ₱700,000 purposely for the establishment and maintenance of new classes in barrio schools, 1,002 classes were opened, 1,002 teachers employed, and more than 50,000 pupils enrolled in the public schools.

Needs.—Among the needs brought out by the director of education are the following: Amendment of Act 3628 (the ₱500,000 appropriation act) to allow the use of surplus funds for equipment and teaching materials; taking a school census of all the children of school age in order to provide a basis to work upon in planning future development; enactment of permissive legislation to increase school revenues; creation of a provincial school fund to provide for adequate support, maintenance, and promotion of provincial schools; better salaries for better qualified teachers; additional insular positions for critic teachers in normal schools and for the principal of each elementary school; increased appropriation for the clerical personnel to insure stable tenure by giving them salaries comparable with those provided for other clerical positions of similar ranks.

OFFICE OF THE COMMISSIONER OF PRIVATE EDUCATION

Personnel.—Few changes have taken place this year in the office. The commissioner was on leave from February 28 to June 19, part of which he spent in the United States investigating private school accrediting systems and arranging for the work of Mr. Daniel M. Salcedo, superintendent of the district of Manila, who was sent to the United States under the provisions of Act 3290 to receive training preparatory to taking charge or the testing work of the office. During the absence of the commissioner from the islands Mr. Line J. Castillejo, superintendent of collegiate instruction, was designated acting commissioner. During the year

Mrs. Helen S. Moir was temporarily assigned to the position of superintendent of English instruction, vice Mrs. Josephine O. Marquardt, who resigned effective June 9, 1929, in order to accept a position in the University of the Philippines. The 1929 budget made possible the appointment of an additional supervisor during the year.

The personnel has on the whole done very good work, and several of the employees increased their attainments through study at the various local colleges. Two supervisors are taking post-graduate work in education and they expect to receive soon their master of arts degrees. Another supervisor and two clerks have been taking collegiate work in education and will probably receive their B. S. E. degrees in March, 1930.

The budget of 1930 provided the office with one extra position or superintendent of tests and measurements at ₱4,000. This position went to Mr. Salcedo. For the amount and kind of work which is performed by the office, there is still a shortage in personnel. An assistant to the superintendent of tests and measurements and an assistant to the superintendent of collegiate instruction are very badly needed. An even greater need, however, is that of increases in salary for some of these employees now on the staff. In a large organization like the bureau of education, even with an unchanging budget increases are almost always possible, as the great number of employees permit of frequent movement in the service for various reasons, and vacant places are filled by promotions from the ranks. This situation is different in the office of the commissioner of private education, where the positions are very few and the personnel largely permanent, so that increases are only possible when they are actually provided for in the budget.

Income from fees.—During 1929, for the first time, fees were collected for the giving of examinations to pupils of unapproved private schools seeking admission to the public or recognized private schools, and in this way the office of the commissioner of private education brought in revenue to the insular treasury in the amount of ₱1,702.

Central office quarters.—The lack of sufficiently adequate quarters has considerably hampered the efficiency of the work in the central office of the commissioner of private education. The commissioner himself is not provided with a private office where the discussions of confidential matters with private-school authorities are allowed sufficient privacy. It is deemed advisable that an additional room in the Ayuntamiento be set aside for the use of this office, or that an appropriation of at least ₱2,400 be provided for the rental of adequate quarters for this office.

Status of the office.—The department has usually regarded the office of the commissioner of private education as a more or less independent office. But the personnel classification board has refused to regard it as such, apparently in the absence of legislation definitely creating it as such, and has therefore omitted it entirely from its report on the standardization of salaries. Because of the highly technical nature of the work involved in the administration of the office, the department deems it timely to urge its classification into a first-class bureau.

Attitude of private schools.—Since the agitation raised by various interested parties in 1928, there has been a gradual change in the attitude of private schools. It was learned recently from some of the schools which took a leading part in the agitation that they wanted no relaxation of the standards and regulations at the present time, because the schools that are now in the system have met the requirements, and they feel that all schools coming into the system should meet the same requirements. This change of feeling may be attributed also to the issuance of the 1929 Manual of Information, which, while not providing for the lowering of standards, is worded in such a way as to permit greater latitude in the application of these standards.

Tests and tests result.—The office of the commissioner of private education has this year resumed its regular testing of private schools, and it is of interest to note that, in general, the results of these tests verified the results already reached by ordinary supervisory methods.

Standards for technical courses.—During the year 1929 work was continued on the drawing up of standards for the engineering course, the collegiate course in business, and the course in education; and it is hoped to finish this work in 1930. The standards for the nursing course were finally, after a careful investigation and study for two years with very valuable help from the medical advisers to the Governor General, finished and issued.

Minimum standards for the pharmacy and dentistry courses will have to be drawn up as a result of the 1929 legislation lengthening these courses to four years.

Enrollment.—The enrollment in recognized private schools was far greater in 1929 than in any previous year. There were 93,618 pupils reported enrolled

in such schools in 1929 as compared with 84,813 in 1928—an increase of almost 9,000 pupils. Presumably there will be a steady increase in enrollment, as the system is now on a fairly stable basis, and comparatively few cancellations are expected each year.

Approved courses.—The approved courses in December, 1929, number 697 as compared with 621 the year before.

Permits issued.—In 1929 the commissioner issued the largest number of permits to open new schools and new courses since the present office was reorganized in 1926.

Government approval withdrawn.—Only three schools lost their government approval in 1929. The corresponding figure for 1928 was 29 and that for 1927, 30.

Equipment.—With regard to equipment, the private schools are now far better off than they were in previous years. In December, 1929, there were reported 246,932 library books in approved private schools as compared with 193,732 in 1928—an increase of 53,200. The laboratory equipment increased correspondingly.

Instructors.—The fully qualified instructors in private schools for December, 1929, outnumbered the fully qualified instructors for the same month in 1928 by 354, or 12 per cent. Those whose eligibility to teach is defined in certificates issued by the department numbered 538 in 1929, as compared with 525 in 1928. The increase of collegiate enrollment in 1929 brought about an increase of 117 in the number of part-time instructors, but the corresponding increase in full-time instructors was greater, it being 342. With regard to the turnover of instructors, it is rather alarming, there being as many as 1,222 newly appointed instructors in 1929. Most likely, however, there will be longer tenure of office for most of the new teachers as they are largely better qualified.

PHILIPPINE HEALTH SERVICE

General situation.—Health condition was, on the whole, satisfactory. No disease appeared in epidemic magnitude. There was a slight rise in death rate, but such might have been a fluctuation of the natural trend of the mortality curve. A fall in mortality was noted in typhoid fever, malaria, and measles, and a rise in dysentery, tuberculosis, beriberi, respiratory diseases, nephritis, diarrhea, and enteritis, and diseases of early infancy. The infant mortality was also slightly more in 1929 than the average for the past five years.

According to the partial 1929 September report of the health section of the League of Nations, a general increase in death rate similarly occurred in many countries, such as England, Wales, Spain, Hungary, Netherlands, Czechoslovakia, Scotland, Poland, Ireland, Japan, and the United States and in Singapore and Hong Kong.

Partial returns show a decline in the marriage rate. The birth rate increased, however, from 39.12 in 1928 to 39.20 in 1929. This is higher than the average, birth rate for the past five years, which is 38.20.

There was launched during the year an intensive campaign to improve general sanitation, housing conditions, water supply, sewage disposal, milk supply, public markets and slaughterhouses, food and food product establishments, and cemeteries. To insure better supervision of the campaign, five district inspectors were assigned to make constant inspections of provincial and municipal activities, as a result of which many deficiencies and irregularities were discovered and remedied. These inspectors visited 480 municipalities in 43 Provinces.

Personnel.—The insular force numbered 2,870, consisting of 481 physicians, 374 nurses, 1,525 sanitary inspectors, 152 vaccinators, 93 dispensary attendants, and 245 clerks. This was 16 physicians, 33 nurses, 57 sanitary inspectors, 4 vaccinators, 7 dispensary attendants, and 10 clerks more than the force of 1928. Twenty physicians were assigned to administrative and inspection work, 60 to hospital work, 371 to field work (61 in district health, subdistrict health, and municipal health offices, 10 in Manila health office and stations, and 300 in sanitary divisions), 26 to leprosy work (20 in Culion, 6 in treatment stations and skin clinics), and 4 to malaria control work.

One of the difficult problems that confronted the service was the proper selection and effective in-service training of personnel. Various schemes were put into effect. Before applicants for presidents of sanitary divisions were given assignments, they were required to undergo a certain amount of training and to pass an entrance examination. At least one year of residence in a reputable general hospital and reasonable proficiency in the practice of either medicine or surgery were prerequisites to appointment to positions of chiefs and resident physicians of provincial hospitals. Graduate nurses, who were not graduates

of a public health nursing course, were required to undergo practical training for at least one month before they were assigned as district or public health nurses. Two training schools for nurses were maintained and operated as in previous years, namely, the Zamboanga General Hospital Training School for Nurses and the Baguio Hospital School for Nurses. As a result of the activity of these schools, the difficulty previously encountered in securing and retaining graduate nurses to work in these regions is no longer a problem. The health officers' general assembly was held in Baguio last April and May, at which much emphasis was given to practical demonstration and lectures dealing on sanitation and public health. Twelve commissioned officers and one noncommissioned officer were assigned to pursue a course in the school of sanitation and public health, University of the Philippines; and three commissioned officers were in the United States taking special training, two in mental diseases, the third in school medical inspection.

Diseases.—Of cerebrospinal meningitis there were 12 cases and 6 deaths in Manila and 16 cases with 13 deaths in the Provinces. These cases were sporadic and never reached alarming proportions. Laboratory observations revealed that out of over 10,000 specimens examined for detecting carriers, which included those obtained from contacts of cases, only 0.9 per cent were found to be positive.

Few cases of smallpox occurred in the latter part of December in the Islands of Sarangani and Balut, Province of Davao. The appearance of smallpox in these islands was reported to be due to the illegal entrance of two inhabitants of the Meares Island of the Celebes group sometime in the month of October. The victims were apparently all non-Christian natives opposed to vaccination. No other cases appeared in the rest of the archipelago.

It has been estimated that tuberculosis is causing death to more than 12 per cent of the population. Over 30,000 deaths in 1929 are attributed to this disease. In the city of Manila, the mortality went up from 1,737 in 1928 to 1,949 in 1929. The prevalence could not be exactly determined due to incomplete notification of cases, but on the basis of the estimated deaths, it can be said that tuberculosis is the most common disease at the present time. Unsatisfactory prevailing conditions among the masses, such as insanitary environment, insufficient food, poor housing, and indifferent observance of personal hygiene are major factors in the prevalence of the disease. There is no question that the improvement of living conditions is one of the country's most serious needs.

The deaths due to malaria have been reduced to about one-half since 1926. The improvement may have resulted from better diagnosis and use of preventive measures. Both larva (mosquito) and parasitic (human) control are used either singly or combined by using Paris green and plasmochin compound. An intensive study of malaria mosquito was started about the latter part of the year in an effort to discover a more effective control measure.

Beriberi caused death to 17,440 people in 1929 according to partial returns. The estimated number of deaths during the year was 20,366 against 16,777 in 1928. The increase of mortality, especially among infants, might have been chiefly due to insufficient supply of tikitiki which, because of limited appropriation, could not be provided in sufficient quantity.

The number of dysentery cases went up from 11,296 in 1928 to 11,684 (incomplete) in 1929, and the deaths from 4,531 to 4,795 (incomplete), 5,958 estimated. The increase was less noticeable in the Provinces than in Manila, where the outbreak appeared with the alga-fly nuisance. Contaminated water supply and contact infection largely accounted for the outbreaks in the Provinces.

It is estimated that the mortality of influenza remained almost the same as in 1928. Measles, however, had apparently less mortality in 1929 than the average for the past six years. Cholera, too, was under satisfactory control. Largely due to extensive vaccination there was a drop in typhoid cases from 2,705 to 2,216 (incomplete), and a fall in mortality from 1,575 to 1,314 (incomplete), 1,421 estimated, the lowest recorded experience with the disease.

Special attention was given to the control of leprosy, which consisted mostly of detecting, isolating, and treating cases, following up paroled and discharged negatives, and taking proper care of nonleprosy children born of leper parents. The methods of detection and isolation were made more effective by establishing more skin disease clinics and regional treatment stations. During the year, 1,321 lepers were detected and segregated, 553 lepers were rendered negative and released under parole, 380 nonleprosy children separated from their parents, and 27,500 treatments given to 9,300 people. At the end of the year, 6,494 lepers were under segregation, 687 of whom were about to be paroled. A total of 219 bacteriologically positive cases and 94 incipient cases were discovered in the skin clinics. To aid in the eradication of leprosy in the islands, the following sums

were released from the Leonard Wood Memorial: ₱360,000 (donation of Mr. Everseley Childs) for the Cebu Leprosarium, ₱285,000 for use at Culion; and ₱30,000 for the construction and equipment of a skin dispensary at Cebu.

Immunization work.—Partial reports show that a total of 2,545,463 smallpox vaccinations were performed. The antidysentery vaccinations in the city of Manila give a total of 120,092 first injections and 99,690 second injections, and the typhoid and mixed cholera injections totaled 221,418 first injections, 174,256 second injections, 152,296 third injections. The prophylactic inoculations against typhoid, cholera, and dysentery in the Provinces according to partial figures were as follows: Mixed typhoid and cholera, first injection, 965,022; second injection, 537,954; third injection, 30,987; dysentery, first injection, 927,873, second injection, 629,385, third injection, 5,926; pure cholera, first injection, 274,890, second injection, 40,854; third injection, 588; pure antityphoid first injection, 30,901; second injection, 15,483; third injection, 12,832.

School medical inspection.—In the Provinces, out of 253,136 pupils given physical examination, 91,027 were found defective and treated, and 15,049 were excluded to avoid infection of other children. In the city of Manila, 22,499 pupils were examined and 36,234 were immunized against typhoid, dysentery, and cholera. Defective teeth, skin diseases, eye troubles, and diseased tonsils comprised the majority of the ailments; 97.17 per cent of 4,690 public schools inspected were equipped with sanitary toilet facilities.

Industrial hygiene.—Of 1,320 establishments which were inspected 7,286 times only few were found in good condition, the rest were more or less unhygienic. Defects found were ordered corrected.

Rat campaign.—The rat campaign was stressed upon in all ports of entry, especially in Manila. Trapping the rats and removing their breeding places made up the major activities of the campaign. Immediately adjoining the water front, the manufacture, improper storing, and sale of certain foods and products were prohibited and buildings that were not permanently rat proof were tabooed.

Public health nursing.—This activity included visits to the homes for the purpose of teaching better standard of living, giving medical and social relief, and detecting and following up cases of communicable diseases. Medical and social relief were also given in clinics, factories, and schools.

Public health education.—To facilitate the promotion of public health, the education of the masses in health matters was given special attention. Daily press releases and distribution of health pamphlets and health news were inaugurated. Weekly health talks over the radio which were later printed and distributed free to the press, as well as to the personnel of the service for guidance, public conferences, demonstration of health films by a healthmobile, and participation in the Manila carnival and a number of provincial fairs, were the other activities undertaken during the year.

Hospital, laboratory and dispensary service.—There were in operation at the beginning of the year 37 hospitals with 2,786 beds, 1,067 public dispensaries, and 40 diagnostic laboratories. To these were added 3 new hospitals, 225 beds, 1 laboratory, and 3 public dispensaries. Partial reports show that 23,384 patients were admitted in these hospitals, 6,011 surgical operations performed, and 54,501 laboratory specimens examined. A total of 1,019,785 treatments were given at the dispensaries. The construction of one hospital building was completed, and five others were nearing completion at the end of the year. Four modern dispensary buildings were constructed. These institutions were for the most part very useful centers of medical relief, research and public health education, and they are effective agencies for detecting and isolating communicable diseases.

Insane asylums.—The insane were confined in four different institutions, namely, the Insular Psychopathic Hospital, the San Lazaro Hospital, the city sanitarium, and the Billibid Prison ward. During the year the construction of a male chronic ward, four doctors' quarters, and a garage and boys' quarters was started. The garage and boys' quarters were completed, while the others were nearing completion at the end of the year. The construction of one infirmary and isolation ward, including a morgue, and another for occupational therapy was about to be begun. The present capacity of the Insular Psychopathic Hospital is 400 insane. This hospital will hold 800 insane when the male chronic ward is completed. To house even only 50 per cent of the insane in the islands which were approximately 2,500, two more buildings of like capacity are needed.

Other public health activities.—Preventive and medical relief work was undertaken to alleviate the suffering as a result of earthquakes, typhoons, floods, water crises, and fires which occurred in many places. In an effort to discover and remedy physical defects which may handicap the service, employees of the bureau were given complete physical examination. One thousand and ten em-

ployees of other government bureaus were given similar attention. Food handlers in many places were periodically examined. In cooperation with the Rockefeller Foundation three special demonstration health units were established during the year for the purpose of evolving an effective system of rural and urban sanitation. Two similar health units were maintained in cooperation with the school of sanitation and public health of the University of the Philippines. Partial reports show that 7,117 cases of yaws, 10,395 cases of trachoma, and 5,585 cases of tropical ulcers were treated in clinics especially maintained for this kind of service.

Legislation.—During the year the enactment by the legislature of four laws giving facility to the promotion of public sanitation and health was a factor in the improvement of general health conditions among the masses.

The budget.—The amount of the insular appropriations, ₱4,047,296, was ₱316,870 more than the corresponding appropriations for 1928. Act 3114, as amended by Act 3168, provided ₱395,585 for provincial hospitals. The provincial health fund was approximately ₱1,500,000. The total was ₱5,942,881.

Out of the insular appropriations ₱1,172,504 was made available for general administration and sanitation work, ₱386,040 for vaccination purposes, and ₱2,488,752 for medical relief and research, ₱1,378,715 of which was for leprosy work, ₱74,000 for malaria control, and ₱1,036,037 for hospitals, dispensaries, and laboratories. It is estimated that ₱1,450,000 out of the provincial health fund was spent for general administration and sanitation and ₱50,000 for public dispensaries. On the basis of the estimated population, 12,082,366, the per capita cost of general administration and sanitation was ₱0.22, of medical relief and research ₱0.24, and of immunization work ₱0.03. The total was ₱0.49.

Pension and retirement fund.—The pension and retirement fund of the Philippine Health Service now amounts to ₱137,592.54, of which ₱126,121.75 is deposited in the Philippine National Bank and ₱11,470.79 is kept in the insular treasury for regular payments. An average of ₱5,539.55 accrues to this fund every month. There are 57 pensioners, 25 physicians, 22 assistant sanitary inspectors, 4 presidents of sanitary divisions (not physicians), and 6 deceased pensioners whose heirs receive the pensions. The monthly average amount paid to pensioners was ₱4,173.82.

The council of hygiene.—During the year the council of hygiene held 19 meetings, 14 regular and 5 special. In the regular meetings the council discussed and recommended the following: Extension of the sewage system of Manila to the unsewered areas within the city limits; disapproval of the proposed amendment to section 1573 of the Administrative Code (dispensing with the requirements relative to inscription on skimmed milk under certain conditions discretionary to the director of health); giving certain parties the permission to sink artesian wells in the city subject to certain regulations, supervision, and control prescribed by the director of health; disapproval of the lengthening of the quarantine period of negative lepers to more than six months. In the five special meetings an administrative investigation of offenses committed by a health officer was conducted.

BUREAU OF QUARANTINE SERVICE

The functions of the bureau.—Same as heretofore, namely, incoming quarantine, outgoing quarantine, interisland quarantine, medical inspection of arriving aliens, physical examination of applicants for marine licenses, and the maintenance and operation of quarantine stations and of floating equipment required for quarantine work.

The personnel in charge of the service during the year was the same as that in 1928, Surg. R. W. Hart, serving as chief quarantine officer for the Philippine Islands, with an office located at the customhouse. There were also five full-time medical officers on duty in Manila, one in Cebu, and one in Iloilo. At the ports of Legaspi, Zamboanga, Jolo, Davao, Cavite, and Olongapo, part-time officers took charge of the quarantine work.

Except for cerebrospinal meningitis, which occurred on a number of vessels after leaving the Orient, and which was added by a presidential executive order to the list of quarantinable diseases, a condition requiring adjustment of quarantine procedure, practically the same problems and work were handled without unusual difficulty owing to the confidence and cooperation on the part of the public and of steamship owners and agents. The islands were free from plague, smallpox, and cholera during the year, although surrounded almost constantly by foci of the most dangerous quarantinable diseases and in spite of the regular dispatch of vessels from such places for the Philippine Islands, which stressed the

need for quarantine procedure. At all ports of entry, rigid measures of safety were efficiently carried out, in order to prevent the introduction of quarantinable diseases; principally, plague, smallpox, cholera, cerebrospinal meningitis, and typhoid fever. The service was performed along the same general policy of affording the people the greatest measure of protection with the least possible interference with shipping and commercial activities.

Modern plans and methods were based upon the principle brought out at the recent international sanitary convention, that a country infected with quarantinable diseases had as much responsibility to prevent their transmission to other countries as she had the duty to prevent the introduction of like diseases from without. We were fortunate in having officers of the United States Public Health Service, stationed at near-by ports, who performed enormous amount of prophylactic and preventive measures, particularly with persons coming from infected districts.

Incoming quarantine.—Carried on by a close inspection of passengers on vessels arriving from foreign ports. During the year, a number of the designated quarantinable diseases were constantly epidemic in many of the near-by foreign ports. The regulations and restrictions put into effect, were evidently successful in preventing the introduction of the diseases from abroad.

Outgoing quarantine.—Partly as a means of revenue (as far as the Philippines were concerned), and in accordance with the requirements of the sanitary convention, bills of health were issued at all ports of entry to all vessels not engaged in coastwise traffic, prior to sailing.

Interisland quarantine.—During the year, no outbreak of quarantinable diseases requiring quarantine measures occurred, except that of smallpox in Sarangani and Balut Islands, a condition which was favorable and fortunate to commerce and business.

Inspection of immigrants.—During the year 18,313 aliens were inspected, and 130 certified as having diseases specified by the immigration laws, or were under conditions which would interfere with their ability to make a living.

Examination for marine licenses.—There were 589 deck and engineer officers examined at the several ports of the Philippine Islands during the year, to determine their physical soundness, especially with regard to eyesight, hearing, color blindness, which might incapacitate one as an officer of a vessel.

Cerebrospinal meningitis.—Early in the year, reports were received concerning cases of cerebrospinal meningitis on vessels which had left the Philippine Islands en route to Honolulu and the United States. The number of cases increased rapidly as colder weather was encountered on the voyage. Considerable fear that a serious general epidemic would occur called for the adoption of special measures. The United States Public Health Service was requested to assist in the prevention of the disease, particularly in facilitating the isolation and care of cases and contacts from the Philippines and the Orient. Due to the spread of the disease in a rather epidemic form in the Pacific States, the President of the United States issued an Executive order, which included cerebrospinal meningitis in the quarantinable diseases, and provided for the promulgation of the necessary measures, which were also applied to the Philippine Islands.

Cholera.—Occurred during the year on the China coast and was present in a number of places from which vessels came to the Philippines. The most severe epidemic was that in Shanghai during August and September. Owing, however, to the strict measures enforced, its transmission was effectively prevented.

Plague.—Plague has always been considered as the greatest menace to the Philippine Islands, which have been free from the disease for a considerable time, owing to its presence in Singapore, Colombo, Hong Kong, Saigon, Rangoon, and Java. Continuous measures had to be taken to prevent its introduction, such as the fumigation of vessels at all ports of entry.

Smallpox.—With the exception of the outbreak in the islands of Balut and Sarangani, this disease was successfully kept out by effective quarantine measures on vessels from infected ports, such as Hong Kong, Madras, Rangoon, Saigon, Shanghai, and Sourabaya.

Buildings and equipment.—A large number of buildings required constant care in maintenance and upkeep; and so do the force of old boats, one over 30 years old, used in all kinds of weather, which undergo constant deterioration of their wooden part. All this is causing a continuous expense, and has been a long standing problem of the service. Practically all of the funds for repairs during the year were spent, and the deductions made by the coordinating board were badly felt.

The appropriations for 1929 totaled ₱145,864. In addition, ₱17,370 was allotted by the coordinating board which was ₱1,900 smaller than the usual

allotment. There was expended during the year P138,302.92; while a collection of the sum of P3,380 was made for fumigation, sales of subsistence to persons, and of water to vessels.

The chief quarantine officer kept on his recommendation that every effort be made to maintain a rat-free zone in the vicinity of the piers and in places used for the storage of merchandise arriving from foreign ports. In 1929, this campaign was more successful, owing to the cooperation of the bureaus of public works, health, and lands, to which the service feels thankful.

He also recommends that sufficient appropriations be secured annually to replace those buildings torn down for becoming unserviceable, due to dry-rot and the natural deterioration of wood. (For statistical data see annexed tables.)

Very respectfully,

ALEJANDRO ALBERT,
Undersecretary of Public Instruction, in Charge.

BUREAU OF EDUCATION STATISTICAL TABLES

TABLE 1.—*Total annual public-school enrollment and the percentage of school population enrolled in public schools*

Year	Annual enrollment in public schools (September)	Total population ¹	Percentage of total population enrolled in public schools ²	School population ³	Percentage of school population enrolled in public schools ²	Annual enrollment in private schools (July)
1925	1,096,758	11,406,875	9.61	3,001,809	36.54	4,82,526
1926	1,061,525	11,575,176	9.17	3,046,099	34.85	4,88,001
1927	1,099,306	11,744,172	9.36	3,090,572	35.57	86,695
1928	1,111,509	11,913,167	9.33	3,135,044	35.45	84,695
1929	⁴ 1,161,367	12,082,366	9.61	3,179,570	36.53	93,618

¹ The figures for total population by divisions were obtained from the office of vital statistics of the Philippine health service.

² The percentages for previous years, as given in previous annual reports of this bureau, have been revised on the basis of the population data supplied by the Philippine health service.

³ The school population is estimated by dividing the total population by 3.8, which is the ratio of the total population 6-17 years of age to the total population of the islands as reported by the 1918 Census.

⁴ December enrollment.

⁵ The enrollment for Davao, Palawan, and Surigao is for July, 1929.

TABLE 2.—*A summary showing for the islands the percentage of attendance for the last five school years*

School year	Primary	Intermediate	Secondary	Total
1924-25	93.82	95.23	96.62	94.17
1925-26	94.59	95.37	96.43	94.81
1926-27	95.24	96.02	96.72	95.48
1927-28	95.85	96.39	97.13	96.02
1928-29	96.20	96.32	96.97	96.27

TABLE 3.—*The percentage of enrollment for primary, intermediate, and secondary grades, based on the total enrollment for the month of September of each year*

Year	Primary	Intermediate	Secondary	Total
1925	78.70	16.29	5.01	100.00
1926	77.23	17.18	5.59	100.00
1927	76.27	17.92	5.81	100.00
1928	75.32	18.34	6.34	100.00
1929	⁴ 75.99	17.42	6.59	100.00

⁴ Data for Davao, Palawan, and Surigao are for July, 1929.

TABLE 4.—*A summary showing for the islands for the last five years, the percentage of enrollment of secondary students by courses, based on the enrollment for the month of September of each year*

Year	General	Normal	Commercial	Trade	Farming	Nautical	Home economics
1925	75.26	12.09	1.08	2.63	4.19	0.05	4.70
1926	73.96	11.93	1.07	3.43	4.51	.06	5.04
1927	74.70	11.25	.92	4.08	4.01	.07	4.97
1928	72.40	10.32	.80	5.74	4.92	.09	5.73
1929	170.36	9.76	.80	7.02	5.44	.11	6.51

¹ Data for Davao, Palawan, and Surigao are for July, 1929.

TABLE 5.—*A summary based on the annual enrollment and the March monthly enrollment of each school year showing the percentage of pupils dropped during the last five school years*

School year	Percentage dropped			
	Primary	Intermediate	Secondary	Total
1924-25	16.25	14.23	9.52	15.63
1925-26	15.69	16.16	12.73	15.62
1926-27	13.51	12.32	10.49	13.13
1927-28 ¹	12.71	12.14	8.93	12.39
1928-29 ²	12.01	12.80	8.89	11.96

¹ The median percentage of withdrawals for the islands was 14.32.

² The median percentage of withdrawals for the islands was 14.3.

TABLE 6.—*A summary showing for the islands for the last five school years, the percentage of primary, intermediate, and secondary promotions, based on the monthly enrollment for March of each year*

School year	Percentage promoted			
	Primary	Intermediate	Secondary	Total
1924-25	74.40	81.29	74.41	75.49
1925-26	79.63	90.81	82.39	81.61
1926-27 ¹	78.63	88.73	82.40	80.60
1927-28 ¹	79.42	89.70	83.87	81.55
1928-29 ¹	80.79	89.88	84.07	82.67

¹ Based on the corrected enrollment.

TABLE 7.—*Monthly salaries of Filipino teachers, 1928-29*

Classes of teachers	Lowest	Average	Highest
Municipal elementary teachers	₱25.00	₱53.18	₱125.00
Municipal secondary teachers	45.00	103.87	130.00
Municipal elementary principals	40.00	79.04	250.00
Provincial elementary teachers	32.00	78.23	120.00
Provincial secondary teachers	50.00	119.03	183.33
Provincial elementary principals	50.00	87.50	125.00
Provincial secondary principals	110.00	154.72	200.00
Insular elementary teachers	80.00	105.27	183.33
Insular secondary teachers	70.00	138.95	300.00
Insular elementary principals	70.00	104.53	200.00
Insular secondary principals	100.00	182.13	333.33
Supervising teachers (insular)	80.00	130.79	216.67

NOTE.—Four inmates of the San Lazaro Hospital employed as insular teachers at a salary of ₱25 per month each are not included in this table.

TABLE 8.—*Summary of schools of agriculture, 1928-29*

	Agricultural schools	Rural high schools	Settlement farm schools	Grand total
Number of schools.....	15	18	375	408
Total annual enrollment.....	3,989	3,818	21,501	29,308
Total provincial and municipal funds expended.....	P81,297.43	P84,892.47	P11,826.62	P178,016.52
Area of site in hectares:				
Cultivated.....	1,334	360	1,216	2,910
Total.....	8,336	927	4,900	14,163
Number of animals:				
Carabaos.....	634	176	246	1,056
Horses.....	24	6	5	35
Work cattle.....	64	37	86	187
Other cattle.....	552	7	160	719
Hogs.....	850	101	326	1,277
Poultry.....	7,449	2,339	4,182	13,970
Value of school products:				
Animals.....	P36,732.81	P8,085.41	P16,860.57	P61,678.79
Vegetables.....	12,605.42	26,115.51	16,989.04	55,709.97
Field crops.....	129,556.50	19,270.26	58,657.82	207,484.58
Fruits.....	3,001.25	4,219.14	12,341.96	19,562.35
Other products.....	14,413.35	13,652.71	5,573.70	33,639.76
Total.....	196,309.33	71,343.03	110,423.09	378,075.45
Value of products from home projects.....	10,380.12	39,436.85	3,833.77	53,650.74
Total value of products of schools and home projects.....	206,689.45	110,779.88	114,256.86	431,726.19

TABLE 9.—*Agricultural clubs, 1928-29*

	Number of club members with projects	Value of production from projects of club members	Number of animals
Garden vegetables.....	7,121	P33,752.27	-----
Hogs.....	2,431	67,051.85	7,772
Poultry.....	16,412	165,236.56	234,503
Fruits.....	1,009	7,944.13	-----
Cornfield crops.....	251	2,016.00	-----
Cooking.....	3,044	5,566.27	-----
Total.....	30,268	281,567.08	242,275

TABLE 10.—*Industrial production, 1928-29*

	Number of pupils	Total value of production
Embroidery and lace making.....	117,660	P210,596.62
Basketry.....	100,096	131,575.34
Municipal shops.....	24,232	136,529.64
Provincial trade schools.....	5,102	237,152.36
Provincial shops.....	7,574	33,227.65
Miscellaneous.....	237,417	602,101.82
Total.....	492,081	1,351,183.43

TABLE 11.—*Total amount of voluntary contributions for the last four school years*

School year:	Amount
1925-26.....	P1,455,275.84
1926-27.....	1,161,792.90
1927-28.....	784,559.08
1928-29.....	865,005.66

TABLE 12.—*Insular funds released for school-building construction*

	Amount
Elementary school buildings	₱1,775,200
High-school buildings	145,000
Normal-school buildings	15,000
Trade-school buildings	33,000
Agricultural-school buildings	160,000
Total	2,128,000

TABLE 13.—*Additional insular funds released during the calendar year 1929, and used for construction of elementary-school buildings (funds provided by act 3524, typhoon relief fund)*

	Amount		Amount
Batangas	₱14,000	Mindoro	₱10,000
Camarines Norte	15,000	Pampanga	15,000
Capiz	3,000	Samar	15,000
Cebu	3,000	Sorsogon	15,000
Cotabato	3,000	Surigao	5,000
Iloilo	10,000		
Leyte	10,000	Total	118,000

TABLE 14.—*Total governmental expenditures for school purposes for five years, expenditures per capita, and expenditures per pupil*

Year	Total expenditures	Per cent of increase or decrease (—)	Expenditures per capita ¹	Expenditures per pupil ²
1924	₱24,529,540.55	—	₱2.18	₱22.07
1925	24,148,485.49	-1.55	2.12	22.02
1926	25,424,434.32	5.28	2.20	23.95
1927	27,619,506.82	8.63	2.35	25.12
1928	28,994,965.98	4.98	2.43	26.09

¹ Expenditures per capita are figured on the basis of the total population estimates as supplied by the Philippine health service.

² Expenditures per pupil are figured on the basis of the annual enrollment for September.

TABLE 15.—*Governmental expenditures for all purposes and the amount and percentage spent for school purposes in 1928*

Government	Expenditures	Expenditures for school purposes	Percentages which school expenditures were of total expenditures
Insular	₱90,311,320.23	₱18,969,097.81	21.00
Provincial	42,092,517.01	4,402,545.65	10.46
Municipal	23,232,260.80	5,623,322.52	24.20
Total	155,636,098.04	28,994,965.98	18.63

TABLE 16.—*Classification of insular, provincial, and municipal school expenditures in 1928*

Expenditures	Insular	Provincial	Municipal	Total
Aid to Provinces and municipalities	₱11,880,386.93			₱11,880,386.93
Salaries	4,258,381.90	₱2,699,642.05	₱1,965,238.64	8,923,262.59
Outlay	62,598.34	406,237.15	1,897,359.20	2,366,194.69
Other expenses	2,767,730.64	1,296,666.45	1,760,724.68	5,825,121.77
Total	18,969,097.81	4,402,545.65	5,623,322.52	28,994,965.98
Percentage of total expenditures for school purposes	65.42	15.18	19.40	100.00

TABLE 17.—*School expenditures from all governmental sources*

Government	Expenditures, 1927	Expenditures, 1928	Percentage of increase or decrease
Insular.....	₱17,945,183.18	₱18,969,097.81	+5.71
Provincial.....	3,995,459.19	4,402,545.65	+10.19
Municipal.....	5,678,864.45	5,623,322.52	-.98
Total.....	27,619,506.82	28,994,965.98	+4.98

TABLE 18.—*Expenditures from all governmental sources during the fiscal year 1928
for public education, public health, public works, and for other purposes*

Government	Public educa- tion	Public health	Public works	Other purposes	Total
Insular:					
Expenditure.....	₱21,468,689.01	₱4,537,245.82	₱10,903,802.48	₱53,401,582.92	₱90,311,320.23
Percentage.....	23.77	5.03	12.07	59.13	100.00
Provincial:					
Expenditure.....	4,402,545.65	2,396,859.81	17,336,225.16	17,956,886.39	42,092,517.01
Percentage.....	10.46	5.69	41.19	42.66	100.00
Municipal:					
Expenditure.....	5,623,322.52	542,571.46	4,666,160.69	12,400,206.13	23,232,260.80
Percentage.....	24.20	2.34	20.08	53.38	100.00
Total:					
Expenditure.....	31,494,557.18	7,476,677.09	32,906,188.33	83,758,675.44	155,636,098.04
Percentage.....	20.24	4.80	21.14	53.82	100.00

TABLE 19.—*Secondary courses offered (September)*

	Number		
	1927	1928	1929 ¹
Length of courses:			
Complete 4-year courses.....	75	84	93
3-year courses.....	14	15	12
2-year courses.....	14	10	21
1-year course.....	10	18	4
Combination of courses:			
General course only.....	44	42	42
Agricultural course only.....	17	25	15
Trade course only.....	19	23	25
Normal course only.....	8	8	7
Nautical course only.....	1	1	1
Commercial course only.....	1	1	1
Home-economics course only.....	1	1	1
General normal courses.....	4	6	7
General and home-economics courses.....	6	7	8
Normal, home-economics and trade courses.....	1	1	1
Home-economics and trade courses.....	1	2	2
General, normal, and home-economics courses.....	3	3	3
Home-economics and agricultural courses.....	5	6	16
General, normal, home-economics, and commercial courses.....	1	1	1
Home-economics and normal courses.....	1	1	1

¹ Data for the divisions of Davao, Palawan, and Surigao are for July, 1929.

TABLE 20.—*Promotions of elementary and secondary students*

School year	Elementary			Secondary		Percentage promoted based on March monthly enrollment
	Number of students promoted	March monthly enrollment	Percentage of students promoted	Students promoted	March monthly enrollment	
1923-24	663,849	914,967	73	28,552	37,091	77
1924-25	686,400	908,579	76	33,490	45,009	74
1925-26	723,932	887,637	82	39,655	48,133	82
1926-27	722,617	878,420	82	43,737	52,298	83
1927-28	760,678	915,201	83	49,219	58,503	84
1928-29	780,298	922,309	85	55,476	64,834	86

TABLE 21.—*Per cent of pupils withdrawing from elementary and secondary grades from the last five school years*

School year	Per cent withdrawal		
	Elementary	Secondary	Total
1924-25	15.92	9.52	15.64
1925-26	15.77	12.73	15.62
1926-27	13.29	10.49	13.13
1927-28	12.60	8.93	12.39
1928-29	12.17	8.89	11.96

TABLE 22.—*Teacher replacement during years 1928 and 1929*

	In service		Separated		Per cent of replacement	
	1928	1929	1928	1929	1928	1929
Insular	1,677	1,762	208	169	11.77	9.59
Provincial	1,010	1,181	237	263	23.47	22.27
Municipal	23,094	24,189	4,974	4,145	21.54	17.14
Total	25,871	27,132	5,419	4,577	20.95	16.87

TABLE 23.—*Professional training of teachers in all secondary schools, 1928 and 1929*

	1928	1929	Increase (+), decrease (-)
Total number of secondary teachers	1,330	1,485	+155
Number who are graduates in education	535	804	+269
Number who are graduates in liberal arts	1,86	44	-42
Per cent of secondary teachers who are graduates in education or liberal arts	46.69	57.10	+10.41

1 Includes 7 secondary principals.

TABLE 24.—*Teaching experience of Filipino classroom teachers (including principals) on August 1, 1929*

Experience in years	Elementary	Secondary	Total	Percentage
Less than 1 year.....	3,957	260	4,217	16.67
1 year.....	3,300	216	3,516	13.90
2 years.....	2,891	189	3,080	12.18
3 years.....	2,105	164	2,269	8.97
4 years.....	1,726	95	1,821	7.20
5 years.....	1,551	84	1,635	6.46
6 years.....	1,233	86	1,319	5.21
7 years.....	1,060	64	1,124	4.44
8 years.....	1,075	68	1,143	4.52
9 years.....	917	57	974	3.85
10 years.....	791	41	832	3.29
11 to 14 years.....	1,798	85	1,883	7.44
Over 14 years.....	1,410	75	1,485	5.87
Total.....	23,814	1,484	25,298	100.00
Median in years.....	3.88	3.47	3.81	-----

OFFICE OF THE COMMISSIONER OF PRIVATE EDUCATION—STATISTICAL TABLES

TABLE 1 (A).—*Classification of private schools by religious denominations, 1929-30*

NUMBER OF SCHOOLS (COUNTED BY COURSES)

Course	Denomination			
	Catholic	Protestant	Nonsectarian	Total
Primary.....	176	2	25	203
Intermediate.....	115	3	50	168
Secondary.....	75	5	145 ¹	225
College cultural.....	16	7	10	33
Technical ²	15	8	28	51
Miscellaneous ³	4	3	10	17
Totals:				
1929-30.....	401	28	268	697
1928-29.....	378	25	218	621

ENROLLMENT

Primary.....	29,286	107	3,768	33,161
Intermediate.....	9,733	173	3,980	13,866
Secondary.....	8,577	665	24,446	33,688
College cultural.....	857	432	1,482	2,771
Technical.....	2,308	413	6,807	9,528
Miscellaneous.....	114	22	448	584
Totals:				
1929-30.....	50,875	1,812	40,931	93,618
1928-29.....	48,035	2,208	34,570	84,813

¹ The number (145) of nonsectarian secondary courses includes the Mons. Aglipay Institute at Plaridel, Misamis.

² Nursing schools have been included in the technical schools.

³ The special courses, such as music course, etc., have been classified as miscellaneous courses.

TABLE 1 (B).—*Classification of private schools by religious denominations, 1928-29*

NUMBER OF SCHOOLS (COUNTED BY COURSES)

Course	Denomination			
	Catholic	Protestant	Nonsectarian	Total
Primary	164	2	21	187
Intermediate	110	3	41	154
Secondary	69	5	121	195
College cultural	16	7	9	32
Technical ¹	12	6	22	40
Miscellaneous ²	7	2	4	13
Total	378	25	218	621

ENROLLMENT

Primary grades	27,617	110	2,558	30,255
Intermediate grades	9,509	185	3,102	12,796
Secondary grades	7,634	1,089	21,095	29,818
College cultural courses	972	449	2,566	3,987
Technical schools	2,124	357	5,019	7,500
Miscellaneous	179	18	230	427
Total	48,035	2,208	34,570	84,813

¹ Nursing schools have been included in the technical schools.² The special courses, such as music courses, etc., have been classified as miscellaneous courses.TABLE 2 (A).—*Number of private schools (counted by courses)*

Kind of course	1928-29	1929-30	Increase	Percent- age
Primary	187	203	16	8
Intermediate	154	168	14	8
Secondary	195	225	30	13
College cultural	32	33	1	3
Technical	40	51	11	22
Miscellaneous courses	13	17	4	24
Total	621	697	76	11

TABLE 2 (B).—*Number of private schools (counted as incorporated separately)*In December, 1928..... 331
In December, 1929..... 353TABLE 3.—*Enrollment*

Kind of schools	1928-29	1929-30	Increase (+), de- crease (-)	Percent- age
Primary	30,285	33,161	+2,876	+9
Intermediate	12,796	13,886	+1,090	+8
Secondary	29,818	33,688	+3,870	+11
Collegiate cultural	13,987	2,771	-1,216	-30
Technical	7,500	9,528	+2,028	+21
Miscellaneous	427	584	+157	+27
Total	84,813	93,618	+8,805	+9

¹ This figure was recently found to be incorrect, and should be 2,604. The discrepancies arose because the National University reported the technical students twice, once under technical course and once under collegiate cultural course. This change would affect the total enrollment for 1928-29, but no change is being made on our records, as the figures have already been reported as given above.

TABLE 3.—*Enrollment*—Continued

ENROLLMENT IN SUMMER SESSIONS (SECONDARY)

Schools	1928		1929	
	Teachers	Repeaters	Teachers	Repeaters
National University.....	805	200	621	233
Association Institute, main branch.....				52
Far Eastern College.....			192	87
University of Manila.....			232
Total.....	805	200	1,045	372

TABLE 4.—*Number of private schools visited*

Year	Once	Twice	3 times	4 times	More than 4 times
1926.....	80	69	50	25	81
1927.....	61	86	52	28	101
1928.....	67	73	63	48	82
1929.....	71	90	70	35	80

NOTE.—The following schools were not visited during 1929: Sacred Heart's School, Bato, Albay; Divine Child's School, St. Bridget's Academy, Batangas, Batangas; Benedict XV School, San Jose, Batangas; Isabela Institute, Echague, Isabela; Stella Maris School, Lubang, Mindoro; Holy Child's School, Maribatag, Lianga, Surigao; Sto. Nino School, Dapa, Surigao; St. Thomas School, Cabuntog, Surigao; Chinese General Hospital School of Nursing, Manila; Emmanuel Hospital Training School for Nurses, Capiz, Capiz; Escuela de Enfermeras del Hospital de San Juan de Dios, Mary Johnston Hospital Training School for Nurses, Philippine Christian Institute, Manila; St. Luke's Hospital School of Nursing, Manila; Union Mission Hospital Training School for Nurses, Iloilo; the Nurses' Training School, Philippine Christian Institute, Laoag, Ilocos Norte; the Nurses' Training School, Philippine Christian Institute, Vigan, Ilocos Sur.

TABLE 5.—*Permits issued and corporate authorities granted during 1929*

	New schools				Old schools			
	1926	1927	1928	1929	1926	1927	1928	1929
Permits.....	44	31	14	44	76	50	68	88
Corporate authorities.....			1	2	7	3	2

NOTE.—Actual number of corporate authorities granted are counted.

TABLE 6.—*Library*

	December, 1928	December, 1929	Increase	Per cent of increase
Reference books.....	61,069	77,380	16,311	21
Library books.....	132,663	169,552	36,899	22
Total.....	193,732	246,932	53,200	22
Separate subscriptions to periodicals.....	9,465	9,506	41	410

TABLE 7.—*Qualifications, status, and length of service of instructors*

A. QUALIFICATIONS OF INSTRUCTORS

	Decem- ber, 1928	Decem- ber, 1929 ¹	Increase	Decrease	Per cent of increase (+) or decrease (-)
Fully qualified instructors:					
Primary	555	627	72	-----	+11
Intermediate	552	616	64	-----	+10
Secondary	686	904	218	-----	+24
Total	1,793	2,147	354	-----	+12
Instructors having certificates of eligibility:					
Primary	213	223	10	-----	+4
Intermediate	62	31	-----	31	-50
Secondary	250	284	34	-----	+12
Total	525	538	44	31	+2
Instructors not coming under above:					
Primary	86	81	-----	5	-6
Intermediate	42	28	-----	14	-33
Secondary	94	88	-----	6	-6
Total	222	197	-----	25	-11

B. STATUS OF INSTRUCTORS

Part-time instructors:					
Primary	118	124	6	-----	+5
Intermediate	175	169	-----	6	-3
Secondary	282	319	37	-----	+12
Collegiate	242	200	-----	42	-14
Technical	272	388	116	-----	+30
Special	13	19	6	-----	+30
Total	1,102	1,219	165	48	+10
Full-time instructors:					
Primary	736	807	71	-----	+9
Intermediate	481	506	25	-----	+5
Secondary	748	957	209	-----	+22
Collegiate	132	182	50	-----	+27
Technical	67	63	-----	4	-6
Special	18	9	-----	9	-50
Total	2,182	2,524	355	13	+13

C. LENGTH OF SERVICE OF INSTRUCTORS

	Newly ap- pointed in the school during 1929	Now em- ployed in the school and appointed before 1929	Total
Primary	333	513	846
Intermediate	249	383	632
Secondary	404	713	1,117
Collegiate	105	226	331
Technical	120	314	434
Special	11	19	30
Total	1,222	2,168	3,390

¹ The figures for 1929 are not entirely accurate, as many schools having both secondary and collegiate departments reported the same instructors under both headings.

TABLE 8.—*Cancellations of recognition and permits issued during 1929 and during the last three years*

	1926	1927	1928	1929
RECOGNITION				
A. Cancellations affecting entire schools:				
(a) For failure to meet requirements.....		14	13	
(b) Voluntary.....	10	6	6	2
(c) Through failure to operate.....	1	10	9	
(d) Miscellaneous reasons.....			1	1
Total.....	11	30	29	3
B. Cancellations affecting separate grades, years, or courses only:				
(a) For failure to meet requirements.....		5	16	
(b) Voluntary.....	22	4	10	1
(c) Through failure to operate.....	2	17	17	
Total.....	24	26	43	1
Grand total.....	35	56	72	4
PERMITS				
(a) For failure to meet requirements.....		3	12	
(b) Voluntary.....	17	2	6	1
(c) Through failure to operate.....	10	20	4	
Total.....	30	34	23	1

PHILIPPINE HEALTH SERVICE STATISTICAL TABLES

TABLE 1.—*Showing the number of medical personnel*

Rank and assignment	1928	1929
Director of health.....	1	1
Chiefs of divisions.....	5	5
District inspectors.....	5	5
Senior medical inspectors.....	20	22
Medical inspectors.....	23	23
Senior surgeons.....	31	34
Surgeons.....	29	36
Assistant surgeons.....	8	7
Chiefs of hospitals or resident physicians (not assistant surgeons nor in the commissioned service).....	23	19
Presidents of sanitary divisions.....	289	300
Assistant and assistant to district health officers (not in the commissioned service).....	8	6
Physicians—Modern leprosy treatment and clinical investigation, Culion Leper Colony.....	17	16
Physicians—Malaria control (not in the commissioned service).....	4	4
Supernumerary physicians (not in the commissioned service).....	2	3
Total.....	465	481

TABLE 2.—*Showing the number of nonmedical personnel*

Classification	1928	1929
Sanitary inspectors.....	1,468	1,525
Dispensary attendant sanitary inspectors.....	86	93
Vaccinators.....	148	152
Nurses.....	341	374
Clerks.....	235	245
Total.....	2,278	2,389

TABLE 3.—*Showing the number of personnel (insular force)*

Specification	1928	1929
Probational.....	48	75
Temporary.....	125	105
Reinstatement and transfer to this service.....	28	27
Total.....	201	207

TABLE 4.—*Showing the number of separations (insular force)*

Specification	1928	1929
Resignations	49	71
Honorable discharges	1	3
Dismissed or dropped	3	2
Transfers from this service	17	10
Died	4	4
Left	0	0
Services dispensed with	5	1
Retired	13	23
Total	82	95

¹ Excludes 8 pensionaries of provincial status.² Excludes 5 pensionaries of provincial status.TABLE 5.—*Showing the estimated population of the Philippines during the year 1929*

Provinces	Estimated Christian population as of July 1	Estimated Christian and non-Christian population combined
Manila	328,650	328,650
Provinces	10,627,939	11,753,716
Total	10,956,589	12,082,366

TABLE 6.—*Showing the various rates for all Philippines during 1929 as compared with those of previous years*

Years	Estimated population		Rates per 1,000 Christian population			Infant mortality per 1,000 births
	Christian alone	Christian and non-Christian	Marriages ¹	Births	Deaths ¹	
Average of 5 years ending, 1924	9,906,435	10,714,784	14.80	37.39	21.03	159.16
1925	10,356,502	11,401,701	16.45	37.42	19.94	150.18
1926	10,506,525	11,575,176	16.52	38.11	21.89	156.74
1927	10,656,545	11,744,172	17.49	38.88	20.68	152.54
1928	10,806,567	11,913,167	13.44	39.12	20.18	150.08
1929 ²	10,956,589	12,082,366	12.72	39.20	22.18	165.03

¹ Includes transient residents of Manila and those with unknown residence.² Estimated.TABLE 7.—*Showing the various rates for the city of Manila during 1929 as compared with those of previous years*

Years	Estimated population	Rates per 1,000 population			Infant mortality per 1,000 births
		Marriages ¹	Births	Deaths	
Average of 5 years ending December, 1924	299,754	19.33	44.39	25.77	204.98
1925	312,138	18.17	48.20	23.87	167.02
1926	316,266	18.76	46.84	26.37	166.27
1927	320,394	17.39	48.02	24.21	150.33
1928	324,522	8.05	48.41	23.06	151.38
1929	328,650	4.91	48.98	27.24	171.57

¹ Registration incomplete.

TABLE 8.—*Showing the vital returns in the Provinces for the year 1929*

Provinces	Estimated population as of July 1		Total marriages reported	Total births reported	Infant mortality	Total deaths from all causes	Remarks
	Christian	and non-Christian combined					
Abra	62,700	86,570	285	2,039	226	1,057	Up to November.
Agusan	55,070	57,898	227	1,399	194	669	Up to October.
Albay	295,121	295,121	1,530	10,727	1,104	4,779	Up to November.
Antique	169,894	169,894	775	5,256	475	2,555	Up to October.
Bataan	65,688	66,000	450	2,603	600	1,763	Up to November.
Batanes	8,214	8,214	48	250	31	133	Do.
Batangas	394,896	384,899	2,379	12,648	1,356	7,349	Do.
Bohol	417,517	417,517	2,291	13,444	1,818	6,245	Up to October.
Bukidnon	10,110	48,544	22	512	53	208	Up to November.
Bulacan	265,344	266,234	1,801	8,814	2,511	6,670	Do.
Cagayan	210,691	212,603	1,577	9,693	1,684	5,337	Do.
Camarines Norte	59,559	59,622	371	2,363	266	1,149	Do.
Camarines Sur	231,762	232,022	1,616	9,246	1,218	4,939	Up to October.
Capiz	323,460	333,742	1,544	8,900	1,324	5,021	Do.
Catanduanes	83,669	83,669	468	3,236	362	1,507	Up to November.
Cavite	172,315	172,325	1,106	6,139	1,582	4,969	Do.
Cebu	988,584	988,584	4,858	31,384	3,708	14,312	Up to October.
Cotabato	11,077	202,551	55	447	46	206	Do.
Davao	74,952	136,556	232	1,417	185	713	Up to September.
Ilocos Norte	244,348	245,744	937	5,556	693	2,983	Up to October.
Ilocos Sur	237,500	237,500	982	5,686	817	3,270	Do.
Iloilo	556,650	564,380	3,091	17,781	2,448	10,533	Up to November.
Isabela	135,677	137,184	676	4,361	785	2,675	Up to September.
Laguna	226,663	226,674	1,575	8,227	1,907	5,912	Up to November.
Lanao	10,626	124,628	77	464	74	264	Up to October.
La Union	181,893	181,893	878	5,172	639	2,622	Do.
Leyte	736,569	736,569	2,399	18,336	2,827	11,450	Up to September.
Marinduque	60,306	60,312	393	2,598	351	1,281	Up to November.
Mashate	83,320	83,320	429	2,088	210	663	Up to October.
Mindoro	79,671	93,383	430	2,808	570	1,843	Do.
Misamis	236,733	241,850	1,548	10,714	1,804	5,572	Do.
Mountain Province	69,233	341,422	109	2,903	232	1,658	Do.
Nueva Ecija	287,694	288,736	2,208	10,962	2,925	6,640	Do.
Nueva Vizcaya	27,832	35,838	351	2,119	519	1,512	Up to November.
Occidental Negros	448,925	455,236	2,356	16,028	2,475	9,787	Up to October.
Oriental Negros	321,775	321,775	1,263	11,744	1,388	5,776	Up to November.
Palawan	56,802	91,174	210	931	102	535	Up to October.
Pampanga	278,188	280,078	1,957	11,448	2,359	6,045	Up to November.
Pangasinan	653,441	653,539	4,520	23,550	4,568	13,369	Up to October.
Rizal	283,660	283,660	1,715	8,521	2,106	6,891	Up to November.
Romblon	72,412	72,412	349	2,449	278	1,050	Up to October.
Samar	455,190	455,190	1,808	12,113	1,512	5,753	Do.
Sorsogon	216,894	216,894	915	6,876	895	3,302	Do.
Sulu	5,088	227,279	19	185	20	72	Up to November.
Surigao	141,878	143,350	687	3,156	387	1,671	Up to October.
Tarlac	192,709	196,260	1,510	8,797	1,894	4,584	Up to November.
Zambales	91,833	93,764	566	3,174	425	1,766	Do.
Tayabas	250,289	251,111	1,982	10,791	2,033	6,338	Do.
Zamboanga	83,517	179,996	504	3,010	415	1,312	Up to September.
City of Baguio	(1)		46	231	50	188	Up to November.
Culion Leper Coony	(2)		2	100	17	296	Up to October.
Total	10,627,939	11,753,716	58,127	353,426	56,468	197,194	

¹ Population included in Mountain Province.² Population included in Palawan.TABLE 9.—*Showing the number of cases and deaths of typhoid fever*

Years	Manila		Provinces ¹		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Average of 5 years, 1918-1922	724	229	(2)	2,912	(2)	2,198
1923	1,057	270	(2)	1,752	(2)	2,022
1924	745	215	2,417	1,706	3,162	1,921
1925	587	171	2,294	1,639	2,881	1,810
1926	350	92	1,915	1,411	2,265	1,503
1927	395	103	1,824	1,334	2,219	1,437
1928	619	186	2,086	1,389	2,705	1,575
1929 ²	417	114	1,799	1,200	2,216	1,314

¹ Includes transient residents in Manila.² Includes deaths with unknown residence.² Data not available.⁴ Incomplete.

TABLE 10.—*Showing the number of dysentery cases and deaths*

Years	Manila		Provinces ¹		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Average of 5 years, 1918-1922	(²)	327	(²)	11,278	-----	³ 11,641
1923	224	115	(²)	7,051	(²)	7,161
1924	239	147	16,304	8,306	16,543	8,453
1925	195	124	8,999	4,801	9,194	4,925
1926	494	266	16,554	9,073	17,048	9,339
1927	422	242	15,204	6,285	15,626	6,527
1928	240	132	11,056	4,399	11,296	4,531
1929 ⁴	612	277	11,072	4,518	11,684	4,795

¹ Includes transient residents registered in Manila.² Data not available.³ Includes deaths with unknown residence.⁴ Incomplete.TABLE 11.—*Showing the number of cases and deaths of measles in Manila and Provinces by years*

Years	Manila		Provinces ¹		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
1922	154	9	(²)	1,009	(²)	1,017
1923	276	18	2,763	518	3,039	536
1924	248	24	3,496	749	3,744	773
1925	114	3	1,998	420	2,112	423
1926	239	15	7,794	2,892	8,033	2,907
1927	204	20	4,352	949	4,556	969
1928	110	12	2,544	640	2,654	652
1929 ³	148	6	2,131	356	2,279	362

¹ Includes transient residents reported in Manila.² Data not available.³ Incomplete.TABLE 12.—*Showing the number of cases and deaths of influenza in Manila and Provinces*

Years	Manila		Provinces ¹		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
1922	213	39	(²)	2,871	(²)	2,910
1923	291	46	10,371	3,693	10,662	3,739
1924	359	101	18,171	6,633	18,530	6,734
1925	312	90	14,962	5,008	15,274	5,098
1926	265	74	13,040	6,209	13,305	6,283
1927	263	49	15,822	7,034	16,085	7,083
1928	198	64	18,847	7,770	19,045	7,834
1929 ³	338	62	15,078	7,046	15,416	7,108

¹ Including transient cases of Manila.² Data not available.³ Incomplete.

TABLE 13.—*Showing the number of cases and deaths of diphtheria in Manila and Provinces*

Years	Manila		Provinces ¹		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Average of 5 years, 1918-1922.....	(2)	15	(2)	329	(2)	344
1923.....	35	15	(2)	163	(2)	178
1924.....	61	25	162	94	223	119
1925.....	55	16	127	82	182	98
1926.....	124	25	150	95	274	120
1927.....	104	17	125	73	229	90
1928.....	116	19	174	82	290	101
1929 ²	109	22	165	83	274	105

¹ Includes transient cases and deaths in Manila.² Data not available.³ Incomplete.TABLE 14.—*Showing the number of deaths from tuberculosis in Manila and Provinces*

Years	Manila		Provinces ¹		Total	
	Respiratory	Other organs	Respiratory	Other organs	Respiratory	Other organs
1921.....	1,371	134	23,347	1,984	24,718	2,118
1922.....	1,319	174	22,733	1,926	25,052	2,100
1923.....	1,473	197	25,191	1,796	26,664	1,993
1924.....	1,485	228	26,066	1,755	27,551	1,983
1925.....	1,530	135	25,273	2,126	26,803	2,261
1926.....	1,762	188	26,774	1,862	28,536	2,050
1927.....	1,664	186	26,415	1,833	28,075	2,019
1928.....	1,575	162	27,472	1,719	29,047	1,881
1929 ²	1,788	161	24,609	1,542	26,397	1,703

¹ Includes transient deaths in Manila.² Incomplete. Not much can be done in the Provinces for the control of this disease, due to lack of fundsTABLE 15.—*Showing the number of deaths from malaria in the Philippines*

Year	Manila	Provinces ¹	Total	Year	Manila	Provinces ¹	Total
1921.....	77	28,627	28,704	1926.....	51	24,317	24,363
1922.....	36	27,160	27,189	1927.....	27	19,493	19,520
1923.....	29	24,113	24,142	1928.....	37	15,886	15,923
1924.....	50	26,678	26,728	1929 ²	41	12,314	12,355
1925.....	59	24,267	24,326				

¹ Includes transient deaths in Manila.² Incomplete.TABLE 16.—*Showing the number of mortality from beriberi (infants and adults) in the Philippines*

Year	Manila	Provinces ¹	Total	Year	Manila	Provinces ¹	Total
1921.....	705	15,311	16,016	1926.....	526	18,678	19,204
1922.....	648	16,241	16,889	1927.....	288	16,781	17,069
1923.....	698	17,417	18,115	1928.....	368	16,409	16,777
1924.....	600	18,331	18,931	1929 ²	552	16,988	17,440
1925.....	587	17,944	18,531				

¹ Includes deaths of transients in Manila.² Incomplete.

TABLE 17.—*Showing the status of hospitals operated under Act 3114, as amended by Act 3168*

Specification	At the beginning of 1929		At the end of 1929	
	Number	Bed capacity	Number	Bed capacity
Completed and in operation.....	8	1,290	9	1,321
Completed but not yet in operation.....	2	16	1	8
Total.....	10	306	10	329

¹ The bed capacity of Albay Provincial Hospital was increased from 40 to 42 (1928).

² The bed capacity of some of the hospitals under this group was increased during the year.

TABLE 18.—*Showing the number of paroled lepers*

Provinces	Number of released negatives	Number reporting	Provinces	Number of released negatives	Number reporting
Abra.....	4	2	Manila.....	238	84
Agusan.....	4	0	Marinduque.....	0	0
Albay.....	25	9	Masbate.....	2	0
Antique.....	11	3	Nindoro.....	2	1
Bataan.....	9	7	Misamis.....	11	6
Batanes.....	7	4	Mountain Province.....	1	1
Batangas.....	17	10	Nueva Ecija.....	34	0
Bohol.....	50	21	Nueva Vizcaya.....	1	0
Bukidnon.....	1	1	Occidental Negros.....	18	13
Bulacan.....	39	17	Oriental Negros.....	7	3
Cagayan.....	20	16	Palawan.....	12	2
Camarines Norte.....	1	0	Pampanga.....	19	13
Camarines Sur.....	45	21	Pangasinan.....	20	4
Capiz.....	21	6	Rizal.....	71	47
Cavite.....	35	18	Romblon.....	2	2
Cebu.....	661	277	Samar.....	10	8
Cotabato.....	21	11	Sorsogon.....	13	8
Davao.....	8	5	Sulu.....	6	4
Ilocos Norte.....	11	1	Surigao.....	6	3
Ilocos Sur.....	49	22	Tarlac.....	13	12
Iloilo.....	106	68	Tayabas.....	14	10
Isabela.....	3	1	Zambales.....	23	6
Laguna.....	34	28	Zamboanga.....	18	10
Lanao.....	6	1	Guam.....	1	0
La Union.....	12	6	Total.....	1,773	801
Leyte.....	31	9			

SUMMARY

Relapsed.....	160	Number of lepers isolated during 1929:	
Reported dead.....	42	Isolated in Cebu.....	297
Allowed to return to Culion.....	38	Isolated in San Lazaro Hospital.....	568
Paroled, living in the Provinces.....	1,773	Isolated in Iloilo.....	245
Total.....	2,013	Isolated in detention camps.....	211
Leper population as of December 31, 1929:		Total.....	1,321
Confined in Culion.....	5,477	Number of lepers under observation at the end of the year:	
Confined in Cebu.....	336	Culion.....	549
Confined in San Lazaro Hospital.....	448	Cebu.....	110
Confined in Iloilo.....	111	San Lazaro.....	8
Confined in detention camps.....	122	Iloilo.....	20
Total.....	6,494	Total.....	687

TABLE 19.—Showing reports on school medical inspection received from Provinces

Total number of children—		Diseases or defects found—Continued.	
Examined.....	253,136	Defective hearing.....	152
Excluded from schools.....	15,049	Defective nasal breathing.....	151
In dispensaries.....	37,143	Defective teeth.....	61,846
In the homes.....	9,616	Eye.....	2,810
Referred to Red Cross dentist.....	40,888	Ear.....	433
Referred to hospitals.....	3,380	Nose.....	1,286
Diseases or defects found:		Adenoids.....	227
Smallpox or varioloid.....	2	Throat.....	125
Varicella.....	197	Tonsils.....	21,152
Measles.....	230	Skin.....	5,662
Diphtheria.....	1	Lungs.....	66
Whooping cough.....	75	Heart.....	114
Mumps.....	257	Glands.....	471
Tuberculosis.....	35	Nutrition.....	3,235
Other dangerous communicable diseases.....	354	Children 10 per cent or more under weight.....	1,815
Trachoma.....	10,520	Posture.....	649
Acute conjunctivitis.....	4,660	Orthopedic.....	244
Seabiosis.....	8,009	Malaria.....	744
Pediculosis.....	3,132	Intestinal parasites.....	1,647
Contagious skin diseases.....	2,482	Other diseases.....	1,622
Vision.....	313		

TABLE 20.—Showing school medical inspection in Manila during 1929

Enrollment.....		62,658	Number of—Continued.
Number of—			
Schools.....	45	Pupils examined by physicians.....	15,629
Insular schools.....	5	Pupils inspected by nurses.....	6,870
Clinics.....	44	Defects and diseases found.....	18,267
Physicians.....	3	Defectives.....	11,507
Nurses under city schools.....	7	Corrections.....	3,636
Nurses under Red Cross.....	8	Pupils immunized.....	36,234

TABLE 21.—Showing the number and result of the inspection of factories

Kind of establishment	Number	Average number of inspections	Total number of inspections	Total number of laborers
Abaca industries.....	5	Once a year.....	4	250
Auto repair shops and motor.....	26	Once every 2 months.....	146	958
Basket maker shops.....	12	Once a year.....	20	30
Bicycles, rent and repair shops.....	12	Once every 4 months.....	115	30
Button factory.....	6	do.....	6	294
Box factories.....	20	do.....	67	177
Brick factories.....	2	Once every 6 months.....	14	90
Candle factories.....	10	Once a year.....	5	35
Carriage factories.....	26	Once every 6 months.....	150	306
Charging batteries.....	4	Once every 3 months.....	34	24
Dormitories.....	87	Once every month.....	253	
Embroidery shops.....	17	Once every 3 weeks.....	152	905
Firewood deposits.....	18	Once every 2 weeks.....	184	40
Fertilizer factories.....	2	Once a year.....	2	90
Foundry shops.....	42	Once every 6 months.....	85	789
Furniture shops.....	105	Once every 3 months.....	449	1,479
Harness maker shops.....	6	Once every 3 weeks.....	88	23
Hat maker shops.....	60	Once every 3 months.....	311	400
Ink factory.....	2	Once every 6 months.....	4	6
Lumber yards.....	48	Once every 3 months.....	185	964
Lye factory.....	1	Once every 4 months.....	3	2
Matches factory.....	1	do.....	3	225
Machinery shops.....	18	do.....	68	240
Manufacture and sale of polish metals.....	1	do.....	3	3
Nickle-plating shops.....	6	Once every 3 months.....	33	70
Nail manufacture and sale.....	4	Once every 6 months.....	8	19
Oil mills.....	8	Once every month.....	105	1,220
Oxyacetylene welding shops.....	9	Once every 6 months.....	16	85
Photographers' studio.....	36	Once every 2 months.....	202	195
Printing shops press.....	58	do.....	308	1,431
Pawn shops.....	2	Once a year.....	2	6
Private schools.....	40	Once every 6 months.....	79	
Rice mills.....	2	Once every 7 weeks.....	16	39
Rope factories.....	3	Once every 6 months.....	7	390
Secondhand stores.....	114	Once every 2 months.....	668	274
Slipper maker shops.....	159	Once every 7 weeks.....	918	895
Shoemaker shops.....	50	Once every 2 months.....	309	345
Sharpening shops.....	5	Once every 3 months.....	24	18
Shirt factories.....	16	do.....	82	490
Sewing empty sacks.....	2	Once every 6 months.....	4	30
Shipyards.....	3	Once every 5 weeks.....	23	112

TABLE 21.—*Showing the number and result of the inspection of factories—Contd.*

Kind of establishment	Number	Average number of inspections	Total number of inspections	Total number of laborers
Soap factories	8	Once every 3 months.....	33	48
Silversmith shops	119	do.....	462	287
Storage gasoline	4	Once every month.....	52	1,060
Cigar and cigarette factories	76	do.....	888	8,500
Umbrella factories	4	Once every 5 months.....	11	95
Tinsmith shops	53	Once every 3 months.....	245	196
Vulcanizing plants	3	Once every 4 months.....	9	12
Watch repair shops	56	Once every 2 months.....	368	94
Kapoc industries	3	Once a year.....	4	16
Total.....	1,320		7,286	23,287

TABLE 22.—*Showing the names and bed capacity of hospitals under the health service*

Name of hospital	At beginning of 1929		At end of 1929		Increase or decrease (-)
	Number	Bed capacity	Number	Bed capacity	
Antipolo Emergency Hospital.....	1	6	1	6	-7
Albay Provincial Hospital.....	1	42	1	35	(1) -7
Badoc Emergency Hospital.....					
Baguio Hospital.....	1	67	1	67	
Batangas Provincial Hospital.....	1	30	1	30	
Bayombong Hospital.....	1	20	1	20	
Bohol Provincial Hospital.....					
Bontoc Hospital.....	1	35	1	35	
Bukidnon Emergency Hospital.....	1	4	1	9	5
Butuan Public Hospital.....	1	42	1	42	
Cervantes Emergency Hospital.....	1	8	1	8	
Cotabato Public Hospital.....	1	50	1	50	
Cuyo Hospital.....	1	20	1	20	
Davao Public Hospital.....	1	60	1	60	
Dipolog Emergency Hospital.....	1	12	1	12	
Ilocos Norte Emergency Hospital.....	1	12	1	12	
Ilocos Sur Provincial Hospital.....	1	8	1	8	
Iloilo Emergency Hospital.....	1	24			(2) -24
Kiangan Hospital.....	1	15	1	15	
Laguna Provincial Hospital.....	1	35	1	35	
Lanao Public Hospital.....	1	40	1	40	
Leyte Provincial Hospital.....	1	30	1	30	
Lubuagan Hospital.....	1	10	1	10	
Margosatubig Emergency Hospital.....	1	10	1	10	
Mati Emergency Hospital.....	1	6	1	6	
Misamis Public Hospital.....	1	25	1	25	
Naga Provincial Hospital.....	1	22	1	22	
Occidental Negros Province Hospital.....	1	35	1	55	20
Pampanga Emergency Hospital.....	1	12	1	12	
Pangasinan Provincial Hospital.....	1	50	1	50	
Pikit Emergency Hospital.....					
Puerto Princesa Hospital.....	1	16	1	16	8
Psychopathic Hospital.....					400 400
Rizal Memorial Hospital.....	1	50	1	50	
San Lazaro Hospital.....	1	1,265	1	1,070	-195
San Pablo Hospital.....	1	15	1	15	
Sulu Public Hospital.....	1	40	1	40	
Tarlac Provincial Hospital.....	1	30	1	30	
Taysbas Provincial Hospital.....	1	60	1	70	10
Zamboanga General Hospital.....	1	80	1	80	
Culion Leper Colony Hospital.....	1	500	1	500	
Total.....	37	2,786	40	3,011	225

1 The bed capacity of Badoc Emergency Hospital has not yet been received.

2 The Iloilo Emergency Hospital has been temporarily closed since January, 1930.

TABLE 23.—*Showing the summary of the classes of hospitals in operation under the service*

Specification	At beginning of 1929		At end of 1929	
	Number	Bed capacity	Number	Bed capacity
General, insular.....	22	835	23	866
General, provincial.....	3	77	3	77
General, municipal.....	1	15	1	15
Emergency, provincial.....	9	94	10	83
Psychopathic, insular.....			1	400
Contagious, insular.....	1	1,265	1	1,070
Leprosaria ¹	1	500	1	500
Total.....	37	2,786	40	3,011

¹ Including 500 beds for lepers.² Hospital of Culion leper colony.TABLE 24.—*Showing the number of insane*

INSULAR PSYCHOPATHIC HOSPITAL		SAN LAZARO HOSPITAL—continued	
At beginning of year 1929:		Remaining at end of the year:	
Male.....	200	Violent.....	200
Female.....	177	Chronic.....	154
	377		354
Admitted:		CITY INSANE ASYLUM	
Male.....	34	At beginning of year:	
Female.....	208	Male.....	104
	242	Female.....	114
Discharged:		218	
Cured.....	2	Admitted:	
Improved.....	129	Male.....	108
Unimproved.....	19	Female.....	140
Died.....	29		248
	179	Discharged:	
Transferred or absconded.....	37	Cured.....	197
	37	Improved.....	18
Remaining at the end of year:		Unimproved.....	20
Male.....	171	Died.....	25
Female.....	232		260
	403	Transferred or absconded.....	
SAN LAZARO HOSPITAL			3
At beginning of year (male).....		Remaining at end of year:	
Admitted (male).....	267	Male.....	82
	371	Female.....	121
Discharged, died, absconded (males):		203	
Discharged.....	156	BILIBID PRISON INSANE WARD	
Died.....	111	At beginning of year (male).....	
Absconded.....	5	Admitted (male).....	16
	272	Discharged (male).....	26
Transferred (male).....	12	Remaining at end of year (male).....	13

TABLE 25.—*Showing the quantity of vaccines and sera used each year*

Vaccine	Unit	1925	1926	1927	1928	1929
Cholera.....	Cubic centimeter	2,126,789	3,579,070	791,880	718,000	436,000
Combined.....	do	1,594,750	1,256,630	1,666,350	1,832,200	2,564,200
Dysenteric.....	do			188,990	1,026,000	1,979,784
Typhoid.....	do	132,590	184,470	314,500	248,580	241,000
Fresh virus.....	Unit	2,420,000	2,300,000	1,800,000	2,100,000	1,767,900
Dried virus.....	do	1,107,250	1,147,900	1,041,200	1,250,000	1,247,500
Gonococcus.....	Ampule	895	964	1,218	241	231
Streptococcus.....	do	106		34		
SERAS						
Antitetanic.....	Unit	3,837,000	3,269,000	5,142,000	4,770,000	5,230,000
Antidyseptic.....	Ampule	1,300	2,950	6,900	6,950	10,004
Normal horse.....	do	338	202	194	258	133
Cholera.....	do	25	42			
Antidiphtheric.....	Unit	4,500,000	5,000,000	3,500,000	7,065,000	4,500,000

TABLE 26.—*Showing the operation of the pension and retirement fund during 1929*

	From Jan. 1 to Nov. 30, 1929	Estimated for December, 1929	Total up to year 1929
Pension and retirement fund deposited as of Dec. 31, 1928, in the Philippine National Bank	₱106,722.85		₱106,722.85
Pension and retirement fund deposited from Jan. 1 to Nov. 30, 1929, in the Philippine National Bank	19,398.90		19,398.90
Pension and retirement fund deposited in the Philippine National Bank as of Dec. 31, 1929	126,121.75	₱4,081.60	126,121.75
Total deposit in the insular treasury		— ₱10.73	
Less liquid liabilities:		3,756.76	
Accounts payable	₱1,761.67		₱1,750.94
Warrants payable	55,409.98		66,666.74
Total	57,671.65	57,671.65	61,417.68
Total cash of pension and retirement fund deposited in the insular treasury	11,135.22	11,135.22	11,470.79
Total cash of pension and retirement fund of the Philippine Health Service	137,256.97		137,502.54
DISPOSITION MADE OF THE FUND			
Total surplus of the pension and retirement fund of the Philippine Health Service as of Dec. 31, 1928:	118,358.13		118,358.13
Income from Jan. 1 to Dec. 31, 1929:			
Deductions from insular employees	16,396.16	929.61	17,325.77
Deductions from provincial employees	37,375.61	2,824.33	40,199.94
Deductions from municipal employees	290.67	27.61	318.28
Deductions from retired employees, insular	1,698.89	155.74	1,844.63
Deductions from retired employees, provincial	800.80	74.77	875.07
Deductions from account of fines, forfeitures, etc., insular	280.74	24.19	304.93
Deductions on account of fines, forfeitures, etc., provincial	1,036.74	279.09	1,315.83
Interest on bank deposits	4,280.25		4,280.25
Total	62,159.86	4,314.84	66,474.70
Less expenses from Jan. 1 to Dec. 31, 1929:			
Payment to retired employees	38,756.26	3,570.19	42,326.45
Payment to surviving families	4,504.76	409.08	4,913.84
Total	43,261.02	45,261.02	47,240.29
Total surplus of the pension and retirement fund of the Philippine Health Service as of Dec. 31, 1929	18,898.84	3,979.27	19,234.41
Total money of the pension and retirement fund	137,256.97	335.57	137,592.54

TABLE 27.—*Showing the summary of insular appropriations and expenses during 1929*

Item No.	Item	Appropriation Act 3459	Expenditures		Total	Balance
			Jan.-Nov. (actual)	December (estimate)		
1-282-----	Salaries and wages	₱1,002,986.00	₱820,850.95	₱150,377.31	₱971,228.26	₱31,757.74
283-292 and UU-----	Sundry expenses-----	1,971,774.00	1,690,523.87	281,250.13	1,971,774.00	-----
UU-----	Purchase of furniture and equipment	25,000.00	3,011.68	21,988.32	25,000.00	-----
293-301-----	Special appropriations	1,080,600.00	910,613.19	169,986.81	1,080,600.00	-----
	Total-----	4,080,360.00	3,424,999.69	623,602.57	4,048,602.26	31,757.74

TABLE 28.—*Showing the comparative appropriations and expenses of the Philippine Health Service for 1928 and 1929*

Item	Appropriations		Difference	Expenditures		Difference
	1928	1929		1928	1929	
Salaries and wages-----	₱952,026.00	₱1,002,986.00	₱50,960.00	₱917,330.11	₱971,228.26	₱53,898.15
Sundry expenses-----	1,882,800.00	1,971,774.00	88,974.00	1,882,800.00	1,971,774.00	88,974.00
Purchase of furniture and equipment-----	29,000.00	25,000.00	-4,000.00	29,000.00	25,000.00	-4,000.00
Special appropriations-----	866,600.00	1,080,600.00	214,000.00	859,231.22	1,080,600.00	221,459.78
Total-----	3,730,426.00	4,080,360.00	349,934.00	3,688,361.33	4,048,602.26	360,331.93

BUREAU OF QUARANTINE SERVICE

STATISTICAL TABLES

TABLE 1.—*Comparative tabulations of transactions at all ports and quarantine stations of the Philippine Islands*

	1920	1924	1927	1928	1929
Vessels inspected-----	1,116	1,083	1,168	1,270	1,444
Persons inspected-----	157,056	131,817	168,768	173,535	189,917
Vessels fumigated and disinfected-----	532	392	567	488	603
Seaman examined for licenses-----	465	428	762	528	859
Vessels held in quarantine-----	-----	5	11	-----	4
Vessels at the station for treatment-----	6	42	14	18	13
Persons detained in quarantine-----	-----	1,029	-----	-----	-----
Number of pieces of baggage disinfected-----	6,011	3,011	1,520	1,118	976

27321—31—6

TABLE 2.—Number of bills of health issued to vessels bound for the United States and foreign ports

Port	1920	1924	1927	1928	1929
Manila.....	999	996	1,036	1,089	1,346
Cebu.....	105	238	256	289	390
Iloilo.....	127	190	213	209	250
Zamboanga.....	27	136	94	107	131
Jolo.....	55	46	48	63	29
Davao.....	(¹)	(¹)	74	82	164
Legaspi.....	(¹)	(¹)	13	24	29
Cavite.....	30	37	6	4	12
Olongapo.....	3	4	6		
Total.....	1,346	1,647	1,746	1,867	2,351

¹ Port not open prior to 1927.

TABLE 3.—Financial statement

Item	1922	1924	1927	1928	1929
DEBITS					
Appropriation.....	₱150,060.00	₱153,429.00	₱165,244.00	₱165,244.00	₱145,864.00
Allotment by emergency board.....	11,428.56	2,187.52	.00	.00	.00
Allotment by coordinating board.....	.00	.00	.00	.00	17,370.00
Total available during the year.....	161,488.56	155,616.52	165,244.00	165,244.00	163,234.00
CREDITS					
Expended during the year.....	147,821.21	139,744.53	129,623.73	131,870.25	138,302.92
Balance fixed assets allotment carried forward.....	740.30	1,192.60	.00	.00	.00
Reverted to the treasury unexpended.....	12,927.05	14,679.39	35,620.27	33,373.75	24,931.08
Total.....	161,488.56	155,616.52	165,244.00	165,244.00	163,234.00
COLLECTIONS					
Collections for the year.....	347.48	1,498.87	2,362.04	2,456.56	3,580.92
Deposited in the treasury to unappropriated surplus.....	347.48	1,498.87	2,362.04	2,456.56	3,580.92

ANNUAL REPORT OF THE SECRETARY OF FINANCE

MANILA, April 2, 1930.

SIR: I have the honor to submit the following report of the department of finance for the year 1929:

In spite of the decline of business activity at the middle of the year 1929, the economic and business conditions in general of the country were better than those prevailing in 1928. The business during the year under review began auspiciously on account of the momentum of the satisfactory conditions of the previous year, but due to the continued low prices of Philippine staples during the last three years, the destructive typhoons that wrought havoc on crops and property in the various parts of the islands in June and September, and the persistence of the agitation in the United States to restrict the free entrance there of the principal export products of the islands, the slump became inevitable by the middle of the year. However, the gain made during the first half over the business of the preceding years, coupled with the improvements from the fall registered during the closing months, was more than sufficient to offset the reduction in business activity occasioned by the slump and to place the total business of the islands in 1929 above those of the preceding three years.

The presence of many calamities which were considered worse than any suffered for many years before failed to cause diminution in the production for 1929 as compared with the preceding year for the farmers generally succeeded in increasing the total area planted of their farms, raised record crops of sugarcane, coconuts, abaca, cacao, and coffee and obtained the highest yield per hectare for rice, sugar, and coconuts. The production of six leading crops (rice, coconuts, corn, abaca, sugarcane and tobacco) in 1929 was valued at ₱490,972,370, while that for 1928 was only ₱472,584,580, or an increase of ₱18,387,790.

The general price level for the products mentioned above changed but slightly during the year just passed as compared with the preceding year. The change, however, was downward, although the decline amounted to less than 1 per cent.

The total value of our foreign trade during the year under review reached the amount of ₱623,214,234, of which ₱294,320,549 represented the imports and ₱328,893,685 the exports, as against ₱579,422,888 in 1928, of which ₱269,313,796 constituted the imports and ₱310,109,092 the exports. This was so far the biggest total trade of the islands and it broke the record established by the banner year of 1920 when the total trade was ₱601,124,276. The balance of trade which continued to favor the islands amounted to ₱34,573,136 in 1929.

Our trade with the United States, which was about 70 per cent of the total trade of the islands, amounted to ₱434,116,863 in 1929, as against ₱398,887,886 in 1928, thus registering an increase of ₱35,228,977. The trade with countries other than the United States has also registered an increase during the year under review from ₱180,535,002 in 1928 to ₱169,097,371 in 1929.

The prominence of American vessels in foreign-carrying trade of the islands held in previous years was maintained during the year under review. The value of imports and exports carried by American ships amounted to ₱278,913,788 in 1929 as against ₱263,513,136 in 1928, which showed an increase of over ₱15,000,000. The British vessels ranked second again, having carried goods to the value of ₱175,029,376 which, as compared with 1928, marked a decrease of over ₱11,000,000, the value of merchandise carried in British vessels during that year having been ₱186,279,790. The Japanese vessels stood third as in previous years, having carried goods valued at ₱50,580,385 as against ₱40,249,821 in 1928. German ships came next. Goods to the value of ₱29,588,982 were carried by German vessels as compared with ₱28,713,314 in 1928. The Norwegian vessels occupied the fifth place in our foreign-carrying trade, having carried merchandise to the value of ₱29,496,557 as against ₱13,949,417 in 1928.

The value of goods transported by vessels of other countries in 1929 as compared with the preceding year is as follows:

	1929	1928		1929	1928
Dutch.....	₱16,046,732	₱13,600,855	Spanish.....	₱3,053,027	₱3,242,269
Danish.....	15,436,053	2,148,923	Chinese.....	1,949,479	938,335
Swedish.....	3,973,952	4,175,358			

United States absorbed about 76 per cent of the articles exported from the islands. The products of the country exported during 1929 in the order of their importance as to value were sugar, coconut oil, abaca, copra, tobacco products, embroideries, copra meal or cake, lumber, desiccated coconut, and hats.

Thirty-two per cent of our total exportations during the year consisted in sugar, the value of which being ₱106,488,298, as compared with the previous year, when the value of sugar exported was ₱95,085,879, or the increase was 12 per cent. Although the production of sugar in the islands was the largest on record, the value of the exports was only ₱11,400,000 greater than that obtained for 1928, on account of the lower prices secured for this product. Nearly all the sugar of the Philippines was sent to the United States, or about 98 per cent of the total exportations, and it is for this reason that an element of uncertainty became apparent in some quarters and optimism was replaced with forebodings regarding the future of the sugar industry in the islands when the agitation to limit the entrance of sugar into the United States came.

The second largest item of our exports was coconut oil, the value of the shipment sent abroad during the year being ₱58,369,883, as compared with ₱46,978,345 in 1928, which showed an increase of 24 per cent and represented 18 per cent of our total exportations. The increase in the export of this coconut product was accounted for by the fact that the local mills pressed 66 per cent of the Philippine copra production, while in 1928 they pressed only 47 per cent. Almost all our exports of this product during the year went to the United States, 99 per cent having been sent to that country.

The year 1929 has registered a record crop for abaca, but the lower prices of this product throughout the year gave only a small increase in its value. The value of abaca exported during the year reached ₱56,841,100, as against ₱53,187,212 in 1928, or an increase of 7 per cent. Forty-three per cent of our abaca exports went to the United States, 20 per cent to the United Kingdom, and 18 per cent to Japan. The balance went to other countries.

Copra exports during the year registered a decrease of 31 per cent from ₱45,084,682 in 1928 to ₱31,131,641 in 1929. United States consumed more than 73 per cent of this commodity.

An increase of 3 per cent has been registered in the exportations of tobacco products. The value exported during the year was ₱17,579,888, as against ₱17,142,873 in the preceding year. Cigars, cigarettes, and leaf tobacco constituted the chief products of tobacco exported, and greater portions of these went to the United States and Spain.

The activity in the embroidery factories persisted throughout the year, and on account of this the exports registered an increase of 33 per cent from ₱9,047,936 in 1928 to ₱12,023,065 in 1929. Almost all of our embroideries were exported to the United States, the portion sent to other countries being negligible.

Due to greater oil production, the exports of copra meal or cake during the year showed an increase of 31 per cent over similar exports in the preceding year, the value thereof exported in 1929 being ₱7,585,573, as against ₱5,772,274 in 1928. Sixty-nine per cent of our copra meal exported went to Germany, 10 per cent to the United States, and the balance was distributed to many other countries.

Lumber trade was very active last year both here and abroad, and owing to the discovery of new markets, which naturally increased the demand of Philippine lumber in foreign countries, 18 new sawmills began operations during the year under review. The value of lumber exported in 1929 was ₱7,237,918, as compared with ₱6,253,001 in 1928, which showed an increase of 15 per cent. The portion of this product going to the United States seems to be decreasing because of the increasing demand of Philippine lumber in other countries.

The value of desiccated coconut exported during the year was ₱7,080,247, as compared with ₱7,447,171 in 1928, showing a decrease of 5 per cent. Nearly all of our desiccated coconut went to the mother country.

The exports of hats during the year registered a decrease of 39 per cent, the value of this product in 1929 being ₱4,097,457, as against ₱6,717,925 in 1928. The big decline in the exportations of Philippine hats was accounted for by the fact that the market of this product in the United States, where 75 per cent of the exports went last year, was very poor.

The significant features of last year's imports were the great increase in the importation of rice and the big purchase of luxuries including automobiles and its parts and silk and its manufacturers; and the big purchase of electrical machinery, apparatus, and appliances.

In the order of their importance as to value, the principal imports of the year were cotton and its manufactures, iron and steel and their manufactures, mineral

oils, automobiles and parts of and tires for, meat and dairy products, rice, wheat flour, silk and its manufactures, paper and its manufactures and electrical machinery, apparatus and appliances. With the exception of cotton and its manufactures and wheat flour which registered decreases, all the other of these 10 principal articles imported have increased.

From the United States alone, articles amounting to ₱185,185,917 or about 63 per cent of the total imports, entered the islands. This amount was ₱17,469,782 more than that recorded for 1928. Japan, China, French East Indies, Great Britain and Germany came next to the United States in the order named. Of these countries, only Japan registered a decrease but all the others recorded substantial increases.

The larger agricultural production of the islands which gave more revenue to the country was greatly responsible for the satisfactory financial condition during the year 1929. The sound finances were reflected in the profits earned by banks, insurance companies, and mutual building and loan associations and other kinds of business enterprises.

The total currency circulation has decreased from ₱129,620,557,545 in 1928 to ₱123,538,069,665 in 1929. This decrease is explained mainly by the reduction in bank-note circulation due to retirement of circulating notes of the Philippine National Bank and of the Bank of the Philippine Islands as required by their respective charters.

The general banking condition showed a slight improvement during the year 1929. With the exception of the Baguio branch of the Peoples Bank & Trust Co. which opened its business on May 1, 1929, there has been no other addition to the list of banks and trust companies as reported in 1928. The total resources of all banks and trust companies doing business during the year have increased by ₱246,129.60 as compared with the previous year, for the amount for December 31, 1929, was ₱272,638,277.97 and that for December 31, 1928, was ₱272,392,088.37.

In the insurance business, five new companies entered the field here during the year 1929; one of which is a domestic company; two American; and the other two, foreign. Of the 81 insurance companies doing business in the islands on December 31, 1929, 7 were domestic, 24 American, and 50 foreign. The volume of business transacted during the year 1929 by all insurance companies, except life, amounted, in round figures, to ₱889,891,000 with a net premium income of ₱7,026,000 as compared with ₱843,862,000 and ₱6,685,000 respectively, the corresponding figures for the preceding year.

The gold-standard fund which maintains the parity of the Philippine silver peso with the theoretical Philippine gold peso had a cash balance of ₱30,811,183.77 on December 31, 1929. This amount represents about 24.4 per cent of the money of the Philippine Islands in circulation and available for circulation, or an excess of ₱11,876,538.40 per cent over the minimum required and only about 0.6 per cent less than the required 25 per cent maximum of the fund.

The treasury certificate fund takes care of the redemption at par of the treasury certificates issued. The balance of this fund on December 31, 1929, amounted to ₱104,475,850 representing 100 per cent of all treasury certificates in circulation and available for circulation as required by Act No. 3058. It consisted of silver coins to the amount of ₱16,650,743 and United States gold coins in the sum of ₱3,700,000 and of gold deposits in member banks of the Federal reserve system in the United States to the amount of ₱84,125,107.

The following tables show the income, expenditures, and current surplus of the insular government for 1929 and 1928, respectively, segregated by funds, viz, general fund, special fund, and bond fund.

GENERAL FUND—COMPARATIVE BUDGET STATEMENT

Items	Fiscal year—	
	1929	1928
Income:		
Revenue from taxation—		
Import duties.....	₱21,067,524.33	₱19,177,375.81
Excise tax.....	16,758,591.38	16,587,928.93
License and business tax.....	21,953,887.02	21,107,933.62
Wharfage charges.....	3,069,302.15	2,578,361.31
Franchise tax.....	181,760.48	169,044.67
Documentary stamp tax:		
Internal revenue.....	916,989.03	804,384.43
Customs revenue.....	718,467.72	659,066.22
Income tax.....	4,773,096.54	4,227,270.90
Immigration tax.....	338,512.00	296,496.00
Tonnage dues.....	464,403.35	395,031.62
Inheritance tax.....	643,405.54	270,359.86
Others.....		16,966.52
Apportionment of internal revenue to local government.....	₱3,164,083.55	₱3,164,083.55
Total.....	67,721,855.99	63,126,136.34
Incidental revenue—		
Revenue from public forests.....	1,861,185.53	1,668,652.68
United States internal revenue.....	672,200.59	794,626.02
Fines and forfeitures.....	737,646.66	680,100.94
Sales of public domain.....	87,540.23	72,053.15
Others.....	62,870.31	53,843.00
Total.....	3,421,443.32	3,269,275.79
Earnings and other credits—		
Operating income of commercial and industrial units.....	7,765,084.51	8,576,160.34
Other income of operating units.....	98,576.39	114,462.07
Income incidental to functional activities.....	3,756,561.29	3,681,232.11
Interest on bank deposits.....	1,770,340.87	1,624,083.32
Sales of fixed property.....	42,056.87	38,489.64
Sales of mortgaged property and collection of agricultural bank loans.....	908.06	5,004.05
Repayment of interest advanced by the government on railway companies, Act 1730.....	611,123.06	70,802.30
Collection of local government loans.....	330,556.67	484,596.67
Repayment of loans from the currency reserve.....		2,400.00
Repayment of Philippine National Bank losses.....	2,173,030.29	2,853,484.68
Proceeds of Manila Hotel Co. bonds redeemed.....	100,000.00	50,000.00
Surplus transferred from land title assurance fund.....	36,267.27	
Surplus transferred from fidelity insurance fund.....	56,147.43	
Surplus transferred from friar lands estate account.....	707,687.22	607,719.99
Surplus transferred from San Lazaro estate account.....	157,831.45	178,364.89
Total.....	17,606,171.38	18,286,820.06
Credit adjustments—prior year—		
Repayments to prior year's expense.....	634,249.42	420,035.95
Inventory adjustments (sales stock and supplies and materials).....	23,240.22	88,937.17
Expired money orders (sec. 1973 administrative code).....	36,646.32	23,302.72
Total.....	694,135.96	532,275.84
Total income.....	89,443,606.65	85,214,508.03
Expenditure:		
Revenue service—		
Expense of revenue collection.....	1,916,944.70	1,829,673.82
Operating expense of commercial and industrial units.....	7,223,523.45	7,331,968.73
Total.....	9,140,468.15	9,161,642.55
Debt service—		
Interest and exchange on public debt.....	6,188,726.69	6,129,516.65
Contribution to sinking funds of insular bonds.....	3,655,259.78	3,805,053.16
Total.....	9,843,986.47	9,934,569.81
General welfare service—		
Legislation.....	1,949,059.42	1,923,789.31
Executive direction and control.....	2,247,799.33	1,770,462.66
Adjudication.....	2,874,796.54	2,708,936.47
Law and order.....	5,555,731.92	5,477,687.78
Public health.....	4,782,764.83	4,526,144.89
Protection against force majeure.....	233,999.76	228,444.92
Regulation of public utilities.....	132,044.00	121,776.20
Other protective service.....	103,198.43	91,938.39
Public education.....	6,832,126.98	6,907,828.99

GENERAL FUND—COMPARATIVE BUDGET STATEMENT—Continued

Items	Fiscal year—	
	1929	1928
Expenditure—Continued.		
General welfare service—Continued.		
Public correction.....	₱1,058,973.65	₱880,435.75
Public charities.....	764,009.68	712,522.84
Conservation of natural resources.....	757,713.90	700,681.49
Development of commerce.....	2,673,484.19	3,053,971.31
Development of agriculture.....	3,122,680.81	3,048,464.87
Philippine publicity.....	47,844.86	30,000.00
Development of industrial arts and sciences.....	543,995.11	554,231.23
Other economic development.....	288,907.70	241,798.63
Aid to local governments.....	19,618,894.56	17,045,147.45
Total.....	53,588,025.67	50,024,263.18
Outlays and investments—		
Purchase and construction of public works.....	1,318,433.53	5,018,234.71
Purchase and construction of equipment.....	804,184.08	764,266.46
Advances to railway companies under guaranty contract.....	689,552.20	692,795.30
Purchase of private shares of the Philippine National Bank stock.....	4,300.00	3,125.00
Purchase of Manila Railroad Co. stock.....	1,000,000.00	1,000,000.00
Total.....	3,816,469.81	7,478,421.47
Extraordinary charges—		
Retirement gratuities, act 2589 as amended.....	204,925.41	191,546.08
Pension, act 2922.....	12,000.00	12,000.00
Expenses of issue and sale of bonds.....	6,350.35	446.70
Reimbursement of expenditures for the Legislative Building, Act 3112.....		440,800.00
Total.....	223,275.76	644,792.78
Debit adjustments—prior year—		
Accounts receivable written off.....	5,332.82	1,027.51
Losses from revaluation of stock inventory.....		129.90
Total.....	5,332.82	1,157.41
Transfer of funds—		
University of the Philippines.....	1,876,000.00	1,820,000.00
Cadastral survey fund (restoration of reverted income).....	123,080.15	135,559.76
Los Baños Quarry.....	120,000.00	
Cadastral survey loan fund to corporations of private surveyors.....		416,400.00
Andrés Bonifacio Monument fund.....	97,000.00	
William Atkinson Jones mausoleum.....		10,000.00
Total.....	2,216,080.15	2,381,959.76
Total expenditures.....	78,833,835.83	79,626,806.96
Increase (decrease) in surplus during the year:		
Surplus from current year's revenue.....	13,042,497.51	9,363,078.44
Surplus from previous year's revenue.....	2,432,729.69	3,775,877.37
Total.....	10,609,767.82	5,587,701.07
Add, surplus, Jan. 1.....	41,179,267.46 ^b	35,591,566.39
Surplus, Dec. 31:		
Appropriated.....	4,612,614.09	3,561,795.79
Unappropriated.....	47,176,421.19 ^b	37,617,471.67
Total.....	51,789,035.28 ^b	41,179,267.46

SPECIAL FUND—COMPARATIVE STATEMENT OF RECEIPTS AND EXPENDITURES

Items	Fiscal year—	
	1929	1928
Income:		
Revenue from taxation—		
Excise tax.....	₱3,997,957.68	₱3,630,533.48
Apportionment of highways special fund.....	3,997,957.68	3,439,173.84
License and business tax.....	1,324,197.70	1,233,590.97
Apportionment of motor vehicle fund, act 3045.....	1,188,864.17	1,000,000.00
Total.....	137,333.53	424,950.61
Earnings and other credits—		
Fines and forfeitures.....	27,417.82	39,639.29
Sales of supplies and materials.....	18,322.55	11,795.14
Income from rentals.....	52,477.74	51,006.29
Interest on deferred payments and on investments and securities.....	401,658.44	255,818.61
Service income.....	981,972.71	617,575.35
Sales of fixed property.....	35,205.23	25,003.55
Sales of San Lazaro real estate.....	44,967.00	55,785.72
Prior year adjustments.....	47,810.21	49,388.77
Sales of friar lands real estates.....	30,910.35	22,986.94
Inspection of tobacco.....	177,057.70	166,445.59
Land title fees.....		32,952.73
Premium on property insurance.....	125,574.31	108,610.53
Premium on surety bonds.....	34,111.31	83,585.98
Voluntary contribution from the public.....	63,200.00	79,457.15
Inventory adjustments.....	2,490.51	76.88
Incidental receipts.....	45,888.24	33,708.96
Repayment of real estate mortgage loans.....	487,924.15	504,248.91
Repayment of cadastral survey loans.....	70,319.28	41,515.05
Repayment of loans to provinces and municipalities.....	317,297.49	54,419.33
Total.....	2,964,635.04	2,234,020.72
Total income.....	3,101,968.57	2,658,971.33
Appropriation from the general fund—		
University of the Philippines.....	1,876,000.00	1,820,000.00
Cadastral survey fund (restoration of reverted income).....	123,080.15	135,559.76
Los Baños Quarry.....	120,000.00	
Andres Bonifacio Monument.....	97,000.00	
Loans to corporations of private surveyors.....		416,400.00
William Atkinson Jones Mausoleum.....		10,000.00
Total appropriations.....	2,216,080.15	2,381,959.76
Total receipts.....	5,318,048.72	5,040,931.09
Expenditures:		
Salaries.....	1,626,920.02	1,528,206.22
Wages.....	517,501.66	495,752.96
Travel expenses of personnel.....	82,620.39	123,461.09
Freight, express and delivery service.....	23,409.11	47,549.92
Postal, telegraph, telephone, radio and cable service.....	21,792.85	23,932.14
Illumination and power service.....	26,343.59	21,890.43
Miscellaneous service.....	155,103.06	112,309.27
Rental of buildings and grounds.....	23,268.53	20,494.52
Consumption of supplies and materials.....	437,159.55	390,244.66
Printing and binding reports, documents and publications.....	20,297.28	16,914.65
Cash contribution and gratuities (other than to local governments).....	55,375.20	87,545.30
Discretionary expenditures.....	1,053.25	1,188.11
Travel expense of persons not government employees.....	76.41	229.96
Maintenance and repair of plant and equipment.....	63,528.99	49,741.47
Purchase of equipment.....	189,665.48	183,792.07
Purchase and construction of public works.....	218,411.05	179,091.72
Real estate mortgage loans, San Lazaro estate.....	323,611.16	486,513.70
Real estate mortgage loans, friar lands estates.....	40,180.00	74,290.00
Loans to provinces and municipalities.....	309,000.00	2,591,300.00
Extraordinary losses.....	94.27	4,145.38
Property insurance losses.....	62,229.56	22,913.49
Shortages and losses paid.....	31,175.01	31,273.56
Deterioration of supplies and sales stock.....	21,778.24	32.83
Engineering construction (contract payments only).....		5,998.45
Losses, uncollectible debts.....		1,011.10
Loans to corporations of private surveyors.....	342,600.00	50,649.57
Purchase of land.....	112,634.88	
Cash contributions to local governments.....		39.13
Apportionment of motor-vehicle fund.....	249,2.5.67	
Apportionment of highways special fund.....	191,359.64	
Total expenditures.....	5,147,288.98	6,550,472.77
Increase in surplus during the year.....	170,759.74	1,509,541.48
Add surplus Jan. 1.....	6,130,608.00	7,640,149.48
Surplus Dec. 31.....	6,301,367.74	6,130,608.00

BOND FUND—COMPARATIVE STATEMENT OF INCOME AND EXPENDITURES

Items	Fiscal year—	
	1929	1928
Balance, Jan. 1:		
Financial interests protection, act 2999—		
National bank circulation Res. act 3174		₱ 400, 585.34
Balance (unassigned).....	10, 156, 000.00	9, 755, 414.66
Manila port works, act 2908—		
Unreleased appropriation.....	1, 023, 772.16	1, 023, 772.16
Released appropriation.....	342, 385.69	650, 945.33
Irrigation systems, act 2940—		
Unreleased appropriation.....	6, 451, 838.96	7, 011, 038.96
Released appropriation.....	895, 254.73	1, 754, 808.96
Cebu port works and improvements, act 3413.....	1, 596, 000.00	
Iloilo port works and improvements, act 3417.....	1, 592, 385.00	
Total.....	22, 037, 636.54	20, 576, 565.41
Income:		
Proceeds of bonds, act 3413.....	824, 500.00	1, 596, 000.00
Proceeds of bonds, act 3417.....	533, 500.00	1, 592, 385.00
Proceeds of collateral bonds.....		4, 548, 942.18
Repayment of advances, act 3112 (act 2940).....		440, 800.00
Transfers—		
Financial interests protection, act 2909—		
National bank circulation, act 3174		400, 585.34
Balance (unassigned).....		400, 585.34
Manila port works, act 2908—		
Released appropriation.....	755, 000.00	
Unreleased appropriation.....	755, 000.00	
Irrigation systems, act 2940—		
Released appropriation.....	1, 675, 000.00	1, 020, 000.00
Unreleased appropriation.....	1, 675, 000.00	1, 020, 000.00
Total.....	1, 358, 000.00	8, 178, 127.18
Total opening balance and income.....	23, 395, 636.54	28, 754, 692.59
Expenditures:		
Construction and equipment of piers, and other works, act 2908.....	96, 424.38	308, 559.64
Construction of irrigation system, act 2940.....	719, 889.11	1, 843, 310.90
Advances for completion of legislative building, act 2940.....	2, 924.25	16, 243.33
Purchase of provincial and municipal bonds.....		4, 548, 942.18
Construction and improvement of Cebu port, act 3413.....	616, 628.52	
Construction and improvement of Iloilo port, act 3417.....	214, 010.50	
Total.....	1, 649, 876.76	6, 717, 056.05
Balance, Dec. 31:		
Financial interests protection, act 2999—		
Balance (unassigned).....	10, 156, 000.00	10, 156, 000.00
Manila port works, act 2908—		
Unreleased appropriation.....	268, 772.16	1, 023, 772.16
Released appropriation.....	1, 000, 961.31	342, 385.69
Irrigation systems, act 2940—		
Unreleased appropriation.....	4, 756, 838.96	6, 431, 838.96
Released appropriation.....	1, 847, 441.37	895, 254.73
Cebu port works, act 3413.....	1, 803, 871.48	1, 596, 000.00
Iloilo port works, act 3417.....	1, 911, 874.50	1, 592, 385.00
Total.....	21, 745, 759.78	22, 037, 636.54

As can be seen from the general-fund statement, the total income for 1929 is ₱89,443,606.65 and ₱85,214,508.03 for 1928. Among the items composing the above total income is the repayment of the Philippine National Bank losses which in the year 1929 amounted to ₱2,173,030.29 and in 1928 ₱2,853,484.68. These amounts deducted from the total income mentioned above will leave a regular income of ₱87,270,576.36 for 1929 and ₱82,361,023.35 for 1928, or an increase of ₱4,909,553.01. This increase was mainly brought about by the greater collection in import duties on rice and silk; in sales tax, income tax, and wharfage charges.

The same statement shows the total expenditures during 1929 to be ₱78,833,838.83 and during 1928 ₱79,626,806.96. Deducting from these totals the special items "Purchase of private shares of the Philippine National Bank stock," "Purchase of Manila Railroad Co. stock" and "expenses of issue and sale of bonds," which amount to ₱1,010,650.35 for 1929 and ₱1,003,571.70 for 1928, the regular expenditures during 1929 will be ₱77,823,188.48, as against ₱78,623,-

235.26 during 1928, or a net decrease of ₱800,046.78. This decrease is due to the fact that a greater portion of the funds allotted for the construction of the post-office building was expended in the year 1928.

The surplus on December 31, 1929, as shown on the general-fund table was ₱51,789,035.28. From this amount, however, there should be deducted the sum of ₱41,768,000 to cover the following items: Estimated yearly outstanding appropriations, ₱3,500,000, net continuing assets, ₱16,000,000, and advances to money-order fund, ₱6,500,000; purchase of shares of stock of the Manila Railroad Co. for the extension of its lines to the Bicol regions authorized under Act No. 3116, ₱1,000,000; redemption of Manila port works bonds issued under Act No. 2908 as authorized under Act No. 3529, ₱9,268,000; estimated amount for construction of government center under Act No. 3597, ₱2,000,000 and released amount for revolving fund for the construction of permanent bridges under Act No. 3500, as amended by Act No. 3627, ₱3,500,000, thus leaving a net unappropriated cash surplus in the amount of ₱10,021,035.28 at the end of the year 1929.

The special-fund table covers continuing appropriations or funds whose unexpended balances do not revert to the general fund at the end of the year, but remain available until exhausted. The table shows a total income of ₱5,318,048.72 during 1929, which when compared to ₱5,040,931.09, the total income during 1928, will show an increase of ₱277,117.63. This increase is mainly explained by larger amount collected for excise tax on gasoline. The surplus of the special fund on December 31, 1929, amounted to ₱6,301,367.74, as compared with ₱6,130,608 on December 31, 1928.

The total amount of bonds issued by the Philippine government up to December 31, 1929, is ₱191,854,000. Deducting from this sum the amount of ₱14,217,000 representing collateral bonds issued against provincial and municipal bonds held by the insular government, the bonded indebtedness of the Philippine government on December 31, 1929, would be ₱177,637,000. Of this amount, ₱154,000,-000 were obligations of the insular government and the balance of ₱23,637,000 were obligations of the provincial and municipal governments.

The debt limit of the insular government as provided in section 11 of the Jones law, as amended, is an amount equal to 10 per cent of the assessed value of the taxable property of the country at any one time, excluding the bonds issued for the purchase of the friar lands estates amounting to ₱14,000,000. The total assessed valuation of the taxable property of the islands as of December 31, 1929, amounted to ₱1,838,784,829. Under this basis the insular government is therefore authorized to incur a total indebtedness of ₱183,878,482. In addition to this, the insular government is also authorized to issue collateral bonds not exceeding ₱20,000,000, secured by an equivalent amount of bonds issued by provincial and municipal governments.

The bonded indebtedness has increased by ₱1,400,000 during the year 1929. This is due to the sale of ₱850,000 worth of Cebu port works and improvements bonds under Act No. 3413 and ₱550,000 worth of Iloilo port works and improvements bonds under Act No. 3417.

The above bond-fund statement shows that the balance of the proceeds of the sale of insular bonds amounted to ₱21,745,759.78 on December 31, 1929, as compared with ₱22,037,636.54 on December 31, 1928, or a decrease of ₱291,876.76 in 1929.

According to law, sinking funds are kept for the redemption of the bonds upon maturity. For the sum of ₱154,000,000 worth of bonds issued by the insular government sinking funds amounting to ₱41,774,922.78 are set aside and for the bonds issued by the provincial and municipal governments amounting to ₱23,637,000, the total amount of sinking funds set aside is ₱7,000,257.49.

On account of the large sum of money invested in government business enterprises, it is necessary to give a general review of their financial situation in this report.

As in the preceding year, the activities of the National Development Co. were limited to the supervision of its investments in the Cebu Portland Cement Co., National Coal Co. and the Sabani estate.

The paid-up capital stock of the National Development Co. on December 31, 1929, was ₱5,936,100, or an increase of ₱300 over that on December 31, 1928. The increase was due to the three shares of stock issued to the new members of the board of directors. The important investments of the company are as follows: Cebu Portland Cement Co., ₱2,750,000; loan to National Coal Co., ₱2,380,527.25; National Coal Co. liquidation account, ₱131,362.55; and Sabani estate (net cost), ₱286,594.30. The total of these investments is ₱5,548,484.10.

The investment in the Cebu Portland Cement Co. represents the sum invested in the purchase of stock of said company; the loan to the National Coal Co.

consists of advances made to said company; the National Coal Co. liquidation account consists of payments effected by the National Development Co. to liquidate the pending obligations of the National Coal Co.; and the investment in the Sabani estate represents the purchase price of the estate plus all direct charges minus its income.

According to the report of the president of the Cebu Portland Cement Co., the net profits of the company in 1929 aggregated ₱660,110.01, against ₱356,364.99 of the preceding year. The net profits for the year 1929 were therefore greater than those for 1928 by ₱303,745.02 and represents 24 per cent of the paid-up capital of the company.

The auditor of the Philippine National Bank has reported that the net profit obtained by the bank during the year under review was ₱3,265,027.37, as against ₱2,884,882.85 for 1928.

The net income of the Manila Railroad Co. during the year showed a slight increase over that of the previous year, for the net income for 1929 was ₱3,160,231.49 as compared with ₱3,041,011.50 for 1928. The company was able to pay the government the sum of ₱250,000 as partial refund of the funds advanced to pay the interest of the bonds of the company guaranteed by the government.

By virtue of Act No. 3519, another bureau known as the bureau of banking was created under the jurisdiction of the department of finance. There are now five bureaus under this department and for further information, a summary of their activities is furnished herein.

BUREAU OF THE TREASURY

Statement showing distribution of cash balances

Names of funds	Cash in treasury vaults		Cash in banks		Total expressed in Philippine currency (pesos)
	United States currency (dollars)	Philippine currency (pesos)	United States currency (dollars)	Philippine currency (pesos)	
General fund	2,254,151.16	13,860,526.355	13,975,507.415	2,897,722.67	44,717,263.855
Gold standard fund	1,850,000.00	16,650,743.00	12,329,623.06	42,062,553.50	30,811,183.77
Treasury certificate fund					104,475,830.00
Depository funds					24,58
Austin memorial fund					2,100,000.00
Bank of the Philippine Islands circulating notes redemption fund, Act No. 3350					4,239,24
Coast and geodetic survey disbursing officers account					7,701.07
Fourth of July celebration fund					712,480.27
Insular disbursing officers account					5,061,738.30
Money-order fund					47,665.93
Manila Railroad Co., Acts Nos. 1510 and 1592					55,435.93
Philippine National Bank emergency fund					55,438.67
Treasurer of the United States and United States disbursing officers accounts					911,288.44
Treasury overage account					151.87
National Development Co.					68,647.48
United States internal revenue documentary stamp					38,198.50
United States military reservation at Bataan					44,611.14
Sinking funds:					
Insular—					
Currency bonds, Act No. 3058					165.25
Financial interest protection bonds, Act No. 2999					18,999.96
Irrigation and permanent public works bonds (sundry) Act No. 3013					59,331.80
Land purchase bonds, Act No. 1749					65,109.13
Manila port works and improvement bonds, Act No. 2908					3,302.39
Manila Railroad Co. purchase bonds, Act No. 2625					108,081.11
Metropolitan water district purchase bonds, Act No. 3204					17,548.21
Public improvement bonds of 1905, 1906, and 1909, Act No. 2425					89,772.65
Public improvement bonds of 1921, Act No. 2940					9,946.79
Cebu port works and improvement bonds, Act No. 3413					250,467.42
Iloilo port works and improvement bonds, Act No. 3417					115,324.06
Provincial and municipal—					
Banguey, Abra, water bonds, Act No. 2838					156,665.03
City of Cebu sewer and water bonds, Act No. 2894					1,904.49
City of Manila public improvement bonds, Act No. 2832					1,819.74
City of Manila sewer and water bonds, Acts Nos. 1323 and 2832					
Majayjay, Laguna, sewer and water bonds, Act No. 2773					
Santa Cruz, Laguna, sewer and water bonds, Act No. 2773					
Province of Bulacan public improvement bonds, Act No. 3331					
Insular—					
Cebu, water bonds, Act No. 2009					37,035
City of Manila public improvement bonds, Act No. 2894					2,476.22
City of Manila sewer and water bonds, Acts Nos. 1323 and 2832					111,006.87
Majayjay, Laguna, sewer and water bonds, Act No. 2773					49,354.22
Santa Cruz, Laguna, sewer and water bonds, Act No. 2773					1,424.55
Province of Bulacan public improvement bonds, Act No. 3331					35,075
					6.94
					4,039.20
					177.12

Province of Canarines Sur public improvement bonds, Act No. 3280	3,786.30
Canarina, Camarines Sur, public improvement bonds, Act No. 3280	193.70
Camarines, Camarines Sur, public improvement bonds, Act No. 3280	193.70
Magarao, Camarines Sur, public improvement bonds, Act No. 3280	581.14
Naga, Camarines Sur, public improvement bonds, Act No. 3280	1,435.46
Province of Ilocos Norte, public improvement bonds, Act No. 3286	967.05
Beccara, Ilocos Norte, public improvement bonds, Act No. 3286	278.36
Laosig, Ilocos Norte, public improvement bonds, Act No. 3286	545.68
Pasiquin, Ilocos Norte, public improvement bonds, Act No. 3286	397.17
Province of Ilocos Sur, public improvement bonds, Act No. 3278	304.06
Vigan, Ilocos Sur, public improvement bonds, Act No. 3278	486.78
Province of Iloilo public improvement bonds, Act No. 3222	855.90
Cabatuan, Iloilo, public improvement bonds, Act No. 3222	108.85
Dingle, Iloilo, public improvement bonds, Act No. 3222	431.22
Iloilo, Iloilo, public improvement bonds, Act No. 3222	806.86
Jaro, Iloilo, public improvement bonds, Act No. 3222	85.85
La Paz, Iloilo, public improvement bonds, Act No. 3222	178.30
Masiin, Iloilo, public improvement bonds, Act No. 3222	655.03
Pavia, Iloilo, public improvement bonds, Act No. 3222	535.80
Pototan, Iloilo, public improvement bonds, Act No. 3222	634.61
Santa Barbara, Iloilo, public improvement bonds, Act No. 3222	373.04
Province of Laguna public improvement bonds, Act No. 3268	175.58
Province of Marinduque public improvement bonds, Act No. 3268	555.28
Province of Nueva Ecija public improvement bonds, Act No. 3229	271.28
Province of Occidental Negros public improvement bonds, Act No. 3229	1,538.21
Province of Pampanga public improvement bonds, Act No. 3282	873.12
Province of Pangasinan public improvement bonds, Act No. 3228	724.76
Province of Tarlac public improvement bonds, Act No. 3281	516.88
Province of La Union public improvement bonds, Act No. 3281	374.32
City of Manila lowland improvement bonds, Act No. 3352	482.40
Bonds fund:	
Financial interest protection bonds, Act No. 2999	8.44
Manila port works and improvement bonds, Act No. 2908	59,277.33
City of Manila lowland improvement bonds, Act No. 313	2,803.56
Iloilo port works and improvement bonds, Act No. 3352	19,523.00
Province of Bulacan public improvement bonds, Act No. 3280	801.80
Province of Camarines Sur and 4 municipalities public improvement bonds, Act No. 3280	24,966.68
Province of Ilocos Norte and 3 municipalities public improvement bonds, Act No. 3286	6,804.06
Province of Laguna public improvement bonds, Act No. 3278	1,548.78
Province of La Union public improvement bonds, Act No. 3281	1,374.90
Province of Nueva Ecija public improvement bonds, Act No. 3229	3,308.10
Province of Pampanga public improvement bonds, Act No. 3282	1,607,890.39
Public improvement bonds of Iloilo, Act No. 2940	50,486.03
Special funds:	
Fidelity fund, section 325, Act No. 2711	114,445.60
Land title assurance fund, Act No. 496	323,642.46
Loan fund, Act Nos. 3335, 3420, and 3632	298,951.23
Property insurance fund, sec. 340, Act No. 2711	4,285,214.98
Miscellaneous (other bureaus)	5,410,561.98

1 Figures not included in total.

Statement showing distribution of cash balances—Continued

Names of funds	Cash in treasury vaults		Cash in banks		Total expressed in Philippine currency (pesos)
	United States currency (dollars)	Philippine currency (pesos)	United States currency (dollars)	Philippine currency (pesos)	
Fiduciary funds:					
City of Cebu sewer and water bonds, Act No. 2009, interest fund	12,075.00	22,500.00	3,593.75		12,075.00
City of Manila public improvement bonds, Act No. 3456, interest fund	378,125.00				22,500.00
City of Manila public improvement bonds, Act No. 2894, interest fund	45,000.00				7,187.50
City of Manila public improvement bonds, Act No. 3382, interest fund	286,525.67				378,125.00
City of Manila lowland improvement bonds, Act Nos. 1323 and 2832, interest fund	250,992.12				45,000.00
City of Manila sewer and water bonds, Act Nos. 1323 and 2832, interest fund	500.00				266,525.67
Metropolitan water district bonds, Act No. 3204, interest fund	1,125.00				250,992.12
Municipality of Banguey, A. Ibra, water bonds, Act No. 2888, interest fund	9,945.00				500.00
Municipality of Santa Cruz, Laguna, sewer and water bonds, Act. No. 2773, interest fund	157.50				500.00
Province of Ilocos Norte public improvement bonds, Act No. 3286, interest fund	2,002.50				9,945.00
Province of Bacarra, Ilocos Norte, public improvement bonds, Act No. 3286, interest fund					157.50
Province of Ilocos Norte, Ilocos Norte, public improvement bonds, Act No. 3286, interest fund					2,002.50
Municipality of Laosag, Ilocos Norte, public improvement bonds, Act No. 3286, interest fund	225.00				2,002.50
Municipality of Pasuquin, Ilocos Norte, public improvement bonds, Act No. 3286, interest fund	4.50				225.00
Province of Iloilo public improvement bonds, Act No. 3222, interest fund	2.25				4.50
Municipality of Potocai, Iloilo, public improvement bonds, Act No. 3222, interest fund	21,236.68				2.25
Province of Bulacan public improvement bonds, Act No. 3331, interest fund	3,600.00				21,236.68
Province of Camarines Sur public improvement bonds, Act No. 3289, interest fund					3,600.00
Municipality of Canaman, Camarines Sur, public improvement bonds, Act No. 3280, interest fund	112.50				112.50
Municipality of Camaligan, Camarines Sur, public improvement bonds, Act No. 3280, interest fund	112.50				112.50
Municipality of Magarao, Camarines Sur, public improvement bonds, Act No. 3280, interest fund	337.50				112.50
Municipality of Naga, Camarines Sur, public improvement bonds, Act No. 3280, interest fund	832.50				337.50
Province of Ilocos Sur public improvement bonds, Act No. 3278, interest fund	7,182.50				832.50
Municipality of Vigan, Ilocos Sur, public improvement bonds, Act No. 3278, interest fund	2,081.25				7,182.50
Province of Laguna public improvement bonds, Act No. 3265, interest fund	8,846.00				2,081.25
Province of La Union public improvement bonds, Act No. 3281, interest fund	2,447.50				8,846.00
Province of Marinduque public improvement bonds, Act No. 3208, interest fund	4,995.00				2,447.50
Province of Nueva Ecija public improvement bonds, Act No. 3229, interest fund	30,914.16				4,995.00
Province of Occidental Negros public improvement bonds, Act No. 3229, interest fund	36,000.00				30,914.16
Province of Pampanga public improvement bonds, Act No. 3282, interest fund	42,742.18				36,000.00
Province of Pangasinan public improvement bonds, Act No. 3228, interest fund	19,282.50				42,742.18
Province of Tarlac public improvement bonds, Act No. 3279, interest fund	7,627.67				19,282.50
Apari Electric Light franchise, sec. 9, Act No. 2841					7,627.67
Balanga, Bataan, Electric Light franchise, Act No. 667					1,484.43
Bulacan, Bulacan, Electric Light franchise, Act No. 667					1,000.00
C. B. Carter electric light franchise, sec. 2, Act No. 667					1,000.00
C. B. Carter electric light franchise, Act No. 667					1,216.89
Calamba, Laguna, electric light franchise, Act No. 667					1,000.00

Calasiao, Pangasinan, Electric Light & Power Co. franchise, sec. 2, Act No. 667	1,000.00
Campilng, Tarlac, Electric Light & Power Co. franchise, sec. 2, Act No. 667	1,000.00
Candeleria Electric & Ice Plant Co., Act No. 667	1,000.00
Cavite electric light franchise, sec. 2, Act No. 667	1,000.00
Dagupan, Pangasinan, Electric Light & Power Co. franchise, sec. 2, Act No. 667	25,745.92
Earthquake fund of 1823, Act No. 2108	1,000.00
Jose de Leon, San Miguel, Bulacan, electric light franchise, sec. 8, Act No. 3502	1,000.00
Los Baños, Laguna, electric light franchise, Act No. 667	1,000.00
Magdalena, Laguna, electric light franchise, Act No. 667	1,000.00
Mangaldan, Pangasinan, Electric Light & Power Co. franchise, sec. 2, Act No. 667	1,000.00
Mariguina, Rizal, Electric Light Co.	1,000.00
Mariguina, Rizal, electric plant, Domingo Bartifista	1,000.00
Nasugbu, Batangas, electric light franchise, Act No. 667	1,000.00
Oas, Albay, Electric Light & Power Co. franchise, sec. 2, Act No. 667	1,000.00
Obando, Bulacan, electric light franchise, Act No. 667	1,000.00
Pampanga electric light franchise, sec. 9, Act No. 2845	1,000.00
Philippine Long Distance Telephone Co., Malolos, Bulacan	1,000.00
Philippine Long Distance Telephone Co., San Fernando, La Union	1,000.00
Philippine Long Distance Telephone Co., Tarlac	1,000.00
Pila, Laguna, electric light franchise, Act No. 667	1,000.00
Pulupandan-Isabela Railroad franchise, sec. 27, Act No. 2485	3,000.00
San Isidro, Nueva Ecija, Electric Light & Power Co. franchise, sec. 2, Act No. 667	1,000.00
San Jose, Nueva Ecija, Electric Light & Power Co. franchise, sec. 2, Act No. 667	1,000.00
Silay Electric & Ice Plant Co. franchise, sec. 9, Act No. 2393	1,170,507.55
Miscellaneous (other bureaus)	2,582,041.78
Total	4,104,151.16
	39,142,136.955
	84,668,839.87
	2,953,601.84
	219,640,178.855

Location of cash balances in banks

Bank credits	General fund	Gold-standard fund	Treasury certificate fund	Depository funds	Sinking funds	Bonds fund	Special funds	Fiduciary funds	Total
UNITED STATES BANKS									
Chase National Bank, New York City:									
Demand deposits at 3 per cent interest per annum	\$3,479,507.415	\$4,981,883.06	\$1,445,989.00						
Time deposits at 3½ per cent interest per annum	340,000.00	1,606,564.50	\$1,050,000.00	\$1,148,128.15	\$2,740,201.905	\$562,673.50	\$2,585,635.53	\$15,808,589.41	
Atlanta & Lowry National Bank, Atlanta, Ga.	1,000,000.00								
Baltimore Trust Co., Baltimore, Md. ¹	500,000.00								
Bank of Italy National Trust & Savings Association, San Francisco, Calif. ¹									

¹ Time deposits at 3½ per cent per annum.

Location of cash balances in banks—Continued

Bank credits	General fund	Gold-standard fund	Treasury certificate fund	Depository funds	Sinking funds	Bonds fund	Special funds	Fiduciary funds	Total
UNITED STATES BANKS—continued									
Bankers Trust Co., New York ¹			\$1,500,000.00						\$1,500,000.00
Bank of Pittsburgh National Association, Pittsburgh, Pa. ¹	\$500,000.00		500,000.00						1,000,000.00
Amaden Safe Deposit & Trust Co., Camden, N. J. ¹			500,000.00						500,000.00
Central Bank & Trust Co., New Orleans, La. ¹			750,000.00						750,000.00
Central National Bank, Portland, Me.			500,000.00						500,000.00
Central National Bank, Cleveland, Ohio ¹	500,000.00		500,000.00						1,000,000.00
Central Trust Co., of Illinois, Chicago, Ill. ¹			1,000,000.00						1,000,000.00
City National Bank, Knoxville, Tenn. ¹			500,000.00						500,000.00
Commerce Trust Co., Kansas City, Mo. ¹			1,500,000.00						1,500,000.00
Commercial National Bank, Washington, D. C. ¹	250,000.00		1,000,000.00						1,000,000.00
Continental Illinois Bank & Trust Co., Chicago, Ill. ¹			\$250,000.00	3,000,000.00					3,500,000.00
Crocker First National Bank of San Francisco, Calif. ¹			1,000,000.00	500,000.00					1,000,000.00
Drovers National Bank, Chicago, Ill. ¹									500,000.00
Farmers Deposit National Bank, Pittsburgh, Pa. ¹			500,000.00	500,000.00					1,000,000.00
Fidelity Trust Co. of New York, New York City ¹				750,000.00					750,000.00
First National Bank of Baltimore, Baltimore, Md. ¹				500,000.00					500,000.00
First National Bank of Birmingham, Ala. ¹				500,000.00					500,000.00
First National Bank of Boston, Mass. ¹				2,000,000.00					2,000,000.00
First National Bank of Joliet, Joliet, Ill. ¹				500,000.00					500,000.00
First National Bank of Omaha, Nebr. ¹				500,000.00					500,000.00
First National Bank of Philadelphia, Pa. ¹				1,000,000.00					1,000,000.00
First National Bank of Pittsburgh, Pa. ¹				500,000.00					500,000.00
Fourth National Bank of Atlanta, Ga. ¹				500,000.00					500,000.00
Guardian Detroit Bank, Detroit, Mich. ¹				1,000,000.00					1,000,000.00
Hannan Trust Co., of New York, N. Y. ¹			1,000,000.00	1,500,000.00					2,500,000.00
Harris Trust & Savings Bank, Chicago, Ill. ¹				1,000,000.00					1,000,000.00
Huntington National Bank, Columbus, Ohio ¹			500,000.00						500,000.00
Huntington National Bank, Youngstown, Ohio ¹			250,000.00						250,000.00
Market Street National Bank, Philadelphia, Pa. ¹				1,500,000.00					1,500,000.00
Mellon National Bank, Pittsburgh, Pa. ¹	250,000.00			1,250,000.00					1,500,000.00
Mercantile Commercial Bank & Trust Co., St. Louis, Mo. ¹				500,000.00					1,750,000.00
Mississippi Valley Merchants State Trust Co., St. Louis, Mo. ¹				500,000.00					1,000,000.00

Time deposits at $3\frac{1}{2}$ per cent per annum.

PHILIPPINE BANKS

Philippine National Bank, Manila:

Fixed deposits at 4 per cent interest per annum.....

Current accounts
Special account

Total

SPECIAL FUNDS

Land title assurance fund, Act No. 496.—The purpose of this fund is to reimburse anyone who may lose title to property under the circumstances specified in Act No. 496.

The income of the fund is derived from percentage fees on lands registered and from interest and dividends on investments.

No claim against the fund was paid during the year under review.

Property insurance fund, Act No. 2711 (secs. 336-341).—This fund has for its purpose the insurance of government vessels and crafts, government machinery, permanent public buildings, government property stored therein, and government property stored in rented buildings, against destruction or damage resulting from fire, earthquake, storm, or other casualty.

With the exception of the properties of the insular government for which the law provides insurance free of charge without formality of any sort, all other properties belonging to a Province, city, municipality, or other local political division, are insured only upon application made by the proper board and council of the Province and city or municipality, respectively, and the approval thereof by the secretary of finance. The premium rates for insurance are fixed by the insular treasurer with the approval of the secretary of finance.

The income of the fund consists of premiums on insurance, profits from investments, and a continuing annual appropriation of ₱50,000 to maintain the fund at a level of not less than ₱500,000. Whenever the total claims against the fund exceed the capital, surplus, and reserves pertaining thereto, the amount necessary to cover the deficit is advanced from the general fund.

The claims against the property insurance fund paid during the year under review amounted to ₱62,229.56 or ₱39,316.07 more than those paid during 1928. This increase was due to damages caused by the typhoon of November 22 and 23, 1928, which swept particularly the Provinces of Samar, Ilocos Norte, Leyte, Sorsogon, Albay, Laguna, and other neighboring Provinces and by the earthquake which visited the Province of Cotabato on December 19, 1928, most of the claims for which were paid only during 1929. The particulars of the claims are as follows:

Province of Albay—Damages to the Albay high-school building caused by typhoon.....	₱10.96
Province of Laguna—Damage to the provincial government building caused by typhoon.....	218.35
Province of Ilocos Norte—Damage to Gabaldon Central School Building of Piddig caused by typhoon.....	77.70
Province of Ilocos Norte—Damages to the Tonoton school building at Piddig caused by typhoon.....	146.25
Bureau of Education—Damages to launch <i>Education</i> caused by typhoon.....	300.00
Province of Ilocos Norte—Damages to the Gabaldon school building of Piddig caused by typhoon.....	79.80
Province of Samar—Damages to the central school building of Catarman caused by typhoon.....	553.66
Province of Pampanga—For replacement of the three market buildings of Angeles destroyed by fire.....	34,456.00
Province of Sorsogon—Damages to the market building of Bacon caused by typhoon.....	111.70
Province of Albay—Repairs to the provincial high-school building which was damaged by typhoon.....	628.71
Province of Cotabato—For replacement of the ice plant building and machinery which were totally destroyed by earthquake.....	3,673.00
Bureau of public works—For replacement of the dormitory building at Benguet auto line at Damertis destroyed by fire.....	6,000.00
Province of Samar—Repairs to the market building of Calbayog which was damaged by typhoon.....	1,499.95
Province of Samar—Cost of repairs made on the launch <i>Curry</i> due to damages caused by typhoon.....	85.71
Province of Samar—Damages to the launch <i>Curry</i> caused by typhoon.....	841.45
Bureau of public works—For replacement of the equipments and supplies burned in the dormitory building of the Benguet auto line at Damertis.....	808.13
Province of Samar—Repairs made on the provincial launch <i>Curry</i> damaged by storm.....	33.63
Province of Cagayan—Damages to the primary central school building of Aparri caused by typhoon.....	548.03
Province of Leyte—Damages to the Gabaldon school building of Hinunangan caused by typhoon.....	219.48
Province of Cotabato—Damages to the municipal building of Cotabato caused by earthquake.....	171.97
Bureau of coast and geodetic survey—For replacement of the property lost on board the steamer <i>Fathomer</i> caused by typhoon.....	7,107.72
Province of Samar—Repairs made on the provincial launch <i>Curry</i> damaged by typhoon.....	47.70
Province of Samar—Damages to the provincial high-school building caused by typhoon.....	1.90
Philippine health service—Restoration of the properties of the Culion leper colony damaged by typhoon.....	4,100.00
Province of Samar—Repairs made on the primary school building of Catarman damaged by typhoon.....	507.76
Total.....	62,229.56

The ratio of losses paid to premiums received during the year 1929 is 49 per cent as compared with 21 per cent in 1928.

Fidelity bond premium fund, Act No. 2711 (secs. 313 to 335).—This fund was established for the purpose of insuring the fidelity of officers and employees of the government and of officers, agents or employees of companies or corporations, the majority of the stock of which is held by the insular government, and is available not only for replacing defalcations, shortages, and unrecovered losses, but also for paying the fees and costs incident to civil proceedings brought against defaulters and the expenses of administration and operation of the fund.

The receipts of the fund consist of premiums, profits on investments, and sums recovered from defaulters.

Section 325 of Act No. 2711 provides that this fund shall be constituted and maintained as a permanent reimbursable fund, at an amount not to exceed ₱100,000 and that any excess over such limit shall revert to the general fund.

Act No. 3373, amending section 322 of Act No. 2711, provides that the bureau, office, Province, municipality, or other branch of the government to which the officers and employees insured pertain shall pay the whole premium on the bonds of said officers and employees.

DEPOSITORY FUNDS

Among the various accounts grouped under "Depository funds," the following are the most important.

Treasurer of the United States account.—This account represents funds deposited by the Treasurer of the United States with the Chase National Bank, New York City, to the credit of the treasurer of the Philippine Islands to meet the expenses of the United States Government in the Philippine Islands.

A comparative statement of the deposits and withdrawals made in the said account during the years 1929 and 1928, is as follows:

	1929	1928
Balance Jan. 1.....	₱1,216,002.20	₱1,407,736.74
Deposits.....	31,000,000.00	27,000,000.00
Withdrawals.....	32,216,002.20 31,221,924.12	28,407,736.74 27,191,734.54
Balance Dec. 31.....	994,078.08	1,216,002.20

Manila Railroad Co. southern lines bonds sinking fund account, Act No. 2574.—This sinking fund was established by the Manila Railroad Co. and is deposited with the Philippine National Bank to the credit of the insular treasurer as an investment. It is for the redemption of these Manila Railroad Co. southern lines bonds, whose maturity has been extended to the year 1959 under the provisions of Act No. 2574.

The balance of the fund on December 31, 1929, amounted to ₱67,193.24.

FIDUCIARY FUNDS

Among the various accounts grouped under fiduciary fund, the following is the most important:

Earthquake fund of 1863 account.—This account represents funds recovered from the Monte de Piedad of Manila through court proceedings, and now held in the Treasury vaults ready for distribution among those damaged by the earthquake of June 3, 1863.

The balance of this fund, amounting to ₱25,745.92 on December 31, 1928, remained the same at the close of business on December 31, 1929.

The original amount deposited by the government in 1863 in the Monte de Piedad was Pfs. 80,000 gold, which, together with accrued interest, amounted to ₱108,939.77. The total amount distributed among the parties concerned, in compliance with the court's orders, was ₱83,193.85 as follows:

1918.....	₱659.00	1922.....	₱23.03
1919.....	78,545.28	1923.....	39.47
1920.....	3,887.59		
1921.....	39.48	Total.....	83,193.85

GOLD-STANDARD FUND

[Act No. 3058]

The function of the gold-standard fund is to maintain the parity of the Philippine silver peso with the theoretical Philippine gold peso, the latter being the unit of value in the Philippine Islands, consisting of 12.9 grains of gold nine-tenths fine.

The operation of the Philippine mint during the year 1929 was undertaken by this fund.

The gold-standard fund netted a gain of ₱3,738,952.79 during the year as compared with ₱3,399,017.17 in 1928. The receipts of the gold-standard fund proper amounted to ₱3,851,060.71 as against ₱3,466,214.30 in 1928. The increase was due to larger amounts of interest received on gold-standard fund and treasury certificate fund deposits with banks in the United States and of premiums collected on exchange sold during the year under review. The total expenses amounted to ₱112,107.92 or ₱44,910.79 more than the total expenses in 1928. This increase was brought about chiefly by the larger amount paid for printing treasury certificates.

The receipts of the gold-standard fund during the year on account of the operation of the mint amounted to ₱19,215.93 only as against the expenses of ₱54,856.32, thereby showing a loss in operation to the amount of ₱35,640.39, which was not real but rather due to the fact that an output of ₱316,821.61 during the year has not been turned over to the insular treasurer, but for some reason had to remain in the custody of the superintendent of the mint. Had this amount been invoiced, the actual receipts from the mint's operation would have been ₱72,525.32, thereby showing a net gain of ₱17,669, instead of a loss of ₱35,640.39.

CONSTITUTION OF THE GOLD-STANDARD FUND

Sections 1622 and 1624 of Act No. 2711 as amended by Act No. 3058 provide among other things that:

"SEC. 1622. * * * the gold-standard fund, * * * shall at all times be maintained in a sum not less than 15 per centum of the money of the government of the Philippine Islands in circulation and available for circulation, including both coins and treasury certificates. If at any time and for any reason said fund shall fall below the minimum hereinabove fixed, the deficiency shall be made up out of any funds then in the insular treasury or thereafter paid into the treasury not specifically appropriated to meet the payment of the principal, sinking fund, or interest of the public debt, and such amount shall be considered as automatically appropriated for the purpose, and the insular treasurer is hereby authorized and directed to transfer the necessary amount to the gold-standard fund to make good any such deficiency therein.

"SEC. 1624. * * *. The gold-standard fund shall be increased in amount through the additions provided for in section sixteen hundred and twenty-two of this act until the amount of the said fund shall be equal to 25 per centum of the money of the Philippine Islands in circulation and available for circulation, including both coins and treasury certificates. Any surplus which may accumulate in the said fund in excess of the said 25 per centum may be transferred, in whole or in part, to the general fund of the insular treasury upon the recommendation of the secretary of finance and the approval of the governor general: * * *."

The cash balance of the gold-standard fund amounted on December 31, 1929, to ₱30,011,183.77 which represents about 24.4 per cent of the money of the Philippine Islands in circulation and available for circulation, or about 0.6 per cent less than the required 25 per cent maximum of the fund, as follows:

Circulation:

Total coinage	₱40,058,977.47
Less coins held in treasury vaults belonging to the gold-standard fund and treasury certificates fund not considered as available for circulation under section 1625 (f) of Act No. 3058	18,303,858.33
	₱21,755,119.14

Outstanding treasury certificates	104,475,850.00
Less treasury certificates in treasury vaults belonging to the gold-standard fund not considered as available for circulation under section 1625 (f) of Act No. 3058	104,475,650.00

Total government money in circulation and available therefor	126,230,969.14
--	----------------

Minimum limit: 15 per cent on the above amount	18,934,645.37
--	---------------

Maximum limit: 25 per cent of the above amount	31,557,742.28
--	---------------

Gold-standard fund cash surplus available

Cash in treasury vaults:		
Philippine currency	₱1,653,115.33	
United States currency (\$2,254,151.16)	4,509,302.32	₱6,161,417.65
On deposit with authorized depositaries in the United States:		
Chase National Bank, New York City (demand)	\$4,984,883.06	
Chase National Bank, New York City (time)	340,000.00	
Baltimore Trust Co., Baltimore, Md. (time)	500,000.00	
Crocker First National Bank, San Francisco, Calif. (time)	1,000,000.00	
Farmers Deposit National Bank, Pittsburgh, Pa. (time)	500,000.00	
Guaranty Trust Co., New York (time)	1,000,000.00	
Huntington National Bank, Columbus, Ohio (time)	500,000.00	
Continental Illinois Bank and Trust Co., Chicago, Ill. (time)	250,000.00	
Mahoning National Bank, Youngstown, Ohio (time)	250,000.00	
Mercantile Commercial Bank and Trust Co., St. Louis, Mo. (time)	500,000.00	
Penn National Bank, Philadelphia, Pa. (time)	1,000,000.00	
Wells Fargo Bank and Union Trust Co., San Francisco, Calif. (time)	1,000,000.00	
Whitney National Bank, New Orleans, La. (time)	500,000.00	
	12,324,883.06	24,649,766.12
Total cash surplus available on Dec. 31, 1929		30,811,183.77
Excess over legal minimum		11,876,538.40
Minimum limit		18,934,645.37
Total cash surplus available on Dec. 31, 1929		30,811,183.77
Deficiency of the fund to reach the legal maximum		746,558.51
Maximum limit		31,557,742.28

TREASURY CERTIFICATE FUND

This fund takes care of the redemption at par of the treasury certificates issued. Its balance amounted to ₱104,475,850 on December 31, 1929. This amount represents the 100 per cent of all treasury certificates in circulation and available for circulation. It consists of silver coins to the amount of ₱16,650,743 and United States gold coins in the sum of ₱3,700,000 (\$1,850,000) and of gold deposits in member banks of the Federal reserve system in the United States to the amount of ₱84,125,107 (\$42,062,553.50).

CIRCULATION

The circulation of the islands on December 31, 1929, consisted of the following:

Treasury certificates:		
Issued	₱104,475,850.00	
Less		
Amount held in treasury vaults pertaining to governmental funds	₱20,747,530.00	
Amount destroyed, estimated	350,000.00	
	21,097,530.00	
Net treasury certificates in circulation		₱83,378,320.00
Philippine coins:		
Issued		
Silver pesos	21,889,679.00	
Half silver pesos	6,272,494.50	
Subsidiary coins	9,166,524.00	
Minor coins	2,730,279.97	
	40,058,977.47	
Less		
Amount held in treasury vaults pertaining to governmental funds:		
Silver pesos	16,026,806.00	
Half silver pesos	2,266,792.00	
Subsidiary coins	71,889.60	
Minor coins	12,840.305	
Amount destroyed, estimated	100,000.00	
	18,478,327.905	
Net Philippine coins in circulation		21,580,649.565
Bank notes:		
Issued to		
Bank of the Philippine Islands	8,123,867.50	
Less		
Notes held in the bank vaults	₱265,705.00	
Amount destroyed, estimated	40,000.00	
	305,705.00	
Philippine National Bank	12,555,478.70	
Less		
Notes held in the bank vaults	1,644,541.10	
Amount destroyed, estimated	150,000.00	
	1,794,541.10	
Total bank notes in circulation		10,760,937.60
Total circulation		18,579,100.10
		123,538,069.665

Per capita circulation of the Philippine Islands ¹

Year	Circulation	Population ²	Per capita circulation
1925	₱127,613,697.15	11,847,899	10.79
1926	127,405,463.08	12,108,688	10.52
1927 ³	127,903,099.66	12,350,500	10.33
1928 ³	116,308,755.44	12,597,800	10.17
1929	126,615,726.31	12,849,700	9.85

¹ The computation of per capita circulation in this report was based on the average circulation throughout the year under review.

² Population estimated only, based on the 1918 census and at a yearly increase of about 2 per cent.

³ Average circulation. In the reports published for those years the amount in circulation at the end of the year is shown.

PUBLIC DEBT

The public debt consists of the following:

Bonds of the insular government proper including friar lands bonds	₱154,000,000
Bonds of the insular government secured by bonds of the provincial, municipal, and other government entities	14,217,000
Bonds of the provincial and municipal government sold to public	9,420,000
Bonds of the provincial, municipal, and other government entities securing insular government bonds	14,217,000
Total	101,854,000

From the above amount the sum of ₱14,217,000 collateral bonds issued against provincial and municipal bonds should be deducted, leaving a net bonded indebtedness of the Philippine government (insular, provincial, municipal, and city governments) of ₱177,637,000 only, for which there were accumulated sinking funds in the sum of ₱48,775,180.27 on December 31, 1929.

From the subjoining table it will be seen that the bonded indebtedness has increased by ₱2,400,000 as compared with that shown in the 1928 report. This increase was caused by the sale of ₱850,000 Cebu port works and improvement bonds, Act No. 3413; ₱550,000 Iloilo port works and improvement bonds, Act No. 3417; and ₱1,000,000 city of Manila public improvement bonds, Act No. 3456.

The interest together with exchange premium at the rate of seven-eighths of 1 per cent paid by the government on account of the insular bonded indebtedness during the year 1929 was ₱6,426,305.17 as compared with ₱6,369,261.06 paid in 1928, or an increase of ₱57,055.11. This increase was due to the interest paid on account of the ₱1,500,000 Cebu port works and improvement bonds and the ₱1,500,000 Iloilo port works and improvement bonds sold in 1928.

The following are the bonds canceled under Act No. 3014:

Purely insular bonds:	
Irrigation and permanent public works bonds	₱1,464,000
Financial interest protection bonds	778,000
Metropolitan water district purchase bonds	44,000
Cebu port works and improvement bonds	28,000
Iloilo port works and improvement bonds	28,000
Total	₱2,342,000

Other bonds:	
City of Manila collateral	396,000
Province and 4 municipalities of Camarines Sur collateral bonds	2,000
Province of Bulacan collateral bonds	8,000
Province of Ilocos Sur and municipality of Vigan collateral bonds	4,000
Province of Nueva Ecija collateral bonds	12,000
Province of Pampanga collateral bonds	16,000
Province of Tarlac collateral bonds	4,000
Total	442,000

Total	2,784,000
-------	------------------

Bonded indebtedness

Insular bonds:	
4 per cent loan of 1904 (1914-1934), land purchase bonds, Acts Nos. 1034, 1749, and 2550	₱14,000,000
4 per cent loan of 1905 (1915-1935) first series, public improvement bonds, Acts Nos. 1301 and 1729	5,000,000
4 per cent loan of 1906 (1916-1936), second series, public improvement bonds, Acts Nos. 1444, 1449, and 1729	2,000,000
4 per cent loan of 1909 (1919-1939), third series, public improvement bonds, Act No. 1954	3,000,000
4 per cent loan of 1916 (1926-1946), Manila Railroad Co. purchase bonds, Acts Nos. 2815, 2624, and 2625	8,000,000
5½ per cent loan of 1920 (1930-1950), Manila port works and improvement bonds, Act No. 2908	12,000,000

In sular bonds—Continued.

5½ per cent loan of 1921 (due 1941), public improvement bonds, Act No. 2940 (irrigation and public works)	10,000,000
5 per cent loan of 1922 (due 1952), financial interest protection bonds, Act No. 2999	10,000,000
4½ per cent loan of 1922 (due 1952), irrigation and permanent public works bonds (sundry), Act No. 3013—	
First sale.....	10,000,000
Second sale.....	4,500,000
Third sale.....	1,500,000
Fourth sale.....	3,000,000
Fifth sale.....	1,500,000
Sixth sale.....	2,000,000
Seventh sale.....	1,100,000
4½ per cent gold loan of 1922 (due 1952)—	
Currency bonds, Act No. 3058—	
First sale.....	20,000,000
Second sale.....	26,000,000
5 per cent loan of 1925 (1935-1955), metropolitan water district purchase bonds, Act No. 3204—	
First sale.....	2,000,000
Second sale.....	500,000
Third sale.....	3,000,000
Fourth sale.....	500,000
4½ per cent loan of 1928 (due 1958), first series, Cebu port works and improvement bonds, Act No. 3413	1,500,000
4½ per cent loan of 1929 (due 1959), second series, Cebu port works and improvement bonds, Act No. 3413	850,000
4½ per cent loan of 1928 (due 1958), first series, Iloilo port works and improvement bonds, Act No. 3417	1,500,000
4½ per cent loan of 1929 (due 1959), second series, Iloilo port works and improvement bonds, Act No. 3417	550,000

Total insular bonds.....

154,000,000

Insular bonds secured by provincial and municipal bonds:

4½ per cent loan of 1922 (due 1950), city of Manila public improvement collateral bonds, Act. No. 3051.....	5,500,000
4½ per cent loan of 1926 (1936-1956), Province of Iloilo and 9 municipalities permanent public improvement collateral bonds, Act 3222.....	1,953,000
4½ per cent loan of 1926 (due 1956), Province of Pangasinan permanent public improvement collateral bonds, Act No. 3228.....	857,000
4½ per cent loan of 1926 (due 1956), Province of Occidental Negros permanent public improvement collateral bonds, Act No. 3229.....	800,000
4½ per cent loan of 1926 (due 1956), Province of Ilocos Norte and 3 municipalities permanent public improvement collateral bonds, Act No. 3266.....	548,000
4½ per cent loan of 1925 (due 1956), Province of Marinduque permanent public improvement collateral bonds, Act No. 3268.....	111,000
4½ per cent loan of 1927 (due 1957), province of Laguna permanent public improvement collateral bonds, Act No. 3265.....	196,000
4½ per cent loan of 1927 (due 1957), Province of Ilocos Sur and municipality of Vigan permanent improvement collateral bonds, Act No. 3278.....	350,000
4½ per cent loan of 1927 (due 1957), Province of Tarlac permanent improvement collateral bonds, Act No. 3279.....	342,000
4½ per cent loan of 1927 (due 1957), Province and 4 municipalities of Camarines Sur permanent improvement collateral bonds, Act No. 3280.....	222,000
4½ per cent loan of 1927 (due 1957), Province of Pampanga permanent improvement collateral bonds, Act No. 3282.....	954,000
4½ per cent loan of 1927 (due 1957), Province of Nueva Ecija permanent improvement collateral bonds, Act No. 3329.....	690,000
4½ per cent loan of 1927 (due 1957), Province of Bulacan permanent improvement collateral bonds, Act No. 3331.....	474,000
4½ per cent loan of 1928 (due 1958), Province of La Union permanent improvement collateral bonds, Act No. 3281.....	220,000
4½ per cent loan of 1928 (due 1958), city of Manila lowland improvement collateral bonds, Act No. 3352.....	1,000,000

Total insular bonds secured by provincial and municipal bonds.....

14,217,000

Provincial and municipal government bonds sold to public:

4 per cent loan of 1905 (1915-1935), first series, Manila sewer and waterworks bonds, Acts Nos. 1323 and 2832.....	2,000,000
4 per cent loan of 1907 (1917-1937), second series, Manila sewer and waterworks bonds, Acts Nos. 1323 and 2832.....	4,000,000
4 per cent loan of 1908 (1916-1938), third series, Manila sewer and waterworks bonds, Acts Nos. 1323 and 2832.....	2,000,000
4 per cent loan of 1911 (1921-1941), city of Cebu sewer and waterworks bonds, Act No. 2009.....	250,000
5 per cent loan of 1919 (1929-1949), Santa Cruz, Laguna, sewer and waterworks bonds, Act No. 2773.....	90,000
5 per cent loan of 1919 (1929-1949), Majayjay, Laguna, sewer and waterworks bonds, Act No. 2773.....	40,000
5 per cent loan of 1919 (1929-1949), Bangued, Abra, sewer and waterworks bonds, Act No. 2838.....	40,000
4½ per cent loan of 1929 (due 1959), first series, city of Manila public improvement bonds, Act No. 3456.....	1,000,000

Total of provincial and municipal governments bonds sold to public.....

9,420,000

Provincial and municipal bonds securing insular bonds:

5½ per cent loan of 1920 (1930-1950), city of Manila permanent improvement bonds, Act No. 2894	₱ 5, 500, 000
4½ per cent loan of 1926 (1936-1956), Province of Iloilo, and 9 municipalities, permanent public improvement bonds, Act No. 3222—	
Province of Iloilo.....	1, 121, 000
Municipality of Iloilo.....	338, 000
Municipality of Cabatuan.....	8, 000
Municipality of Jaro.....	94, 000
Municipality of La Paz.....	80, 000
Municipality of Maasin.....	3, 000
Municipality of Pavia.....	25, 000
Municipality of Santa Barbara.....	104, 800
Municipality of Dingle.....	20, 000
Municipality of Pototan.....	159, 200
4½ per cent loan of 1926 (due 1956), Province of Pangasinan, permanent public improvement bonds, Act No. 3228—	857, 000
4½ per cent loan of 1926 (due 1956), Province of Occidental Negros permanent public improvement bonds, Act No. 3229—	800, 000
4½ per cent loan of 1926 (due 1956), Province of Ilocos Norte and 3 municipalities permanent public improvement bonds, Act No. 3266—	
Province of Ilocos Norte.....	442, 000
Municipality of Bacarra.....	7, 000
Municipality of Laaog.....	89, 000
Municipality of Pasuquin.....	10, 000
4½ per cent loan of 1926 (due 1956), Province of Marinduque permanent public improvement bonds, Act No. 3268—	111, 000
4½ per cent loan of 1927 (due 1957), Province of Laguna permanent public improvement bonds, Act No. 3265—	196, 000
4½ per cent loan of 1927 (due 1957), Province of Ilocos Sur and municipality of Vigan permanent improvement bonds, Act No. 3278—	
Province of Ilocos Sur.....	260, 000
Municipality of Vigan.....	90, 000
4½ per cent loan of 1927 (due 1957), Province of Tarlac permanent improvement bonds, Act No. 3279—	342, 000
4½ per cent loan of 1927 (due 1957), Province and 4 municipalities of Camarines Sur permanent improvement bonds, Act No. 3280—	
Province of Camarines Sur.....	160, 000
Municipality of Naga.....	37, 000
Municipality of Magarao.....	15, 000
Municipality of Canaman.....	5, 000
Municipality of Camaligan.....	5, 000
4½ per cent loan of 1927 (due 1957), Province of Pampanga permanent improvement bonds, Act No. 3282—	954, 000
4½ per cent loan of 1927 (due 1957), Province of Nueva Ecija permanent improvement bonds, Act No. 3329—	690, 000
4½ per cent loan of 1927 (due 1957), Province of Bulacan permanent improvement bonds, Act No. 3331—	474, 000
4½ per cent loan of 1928 (due 1958), Province of La Union permanent improvement bonds, Act No. 3281—	220, 000
4½ per cent loan of 1928 (due 1958), city of Manila lowland improvement bonds, Act No. 3352—	1, 000, 000
Total of provincial and municipal bonds securing insular bonds.....	14, 217, 000
Total of all bonded indebtedness.....	191, 854, 000

Adequate legislation provides for sinking funds to redeem the bonds at maturity. The accretions of the sinking funds consist of the interest derived from investments and of the annual allotments from the insular government, cities, and municipalities concerned, and from the metropolitan water district.

The sinking funds at the close of the year were as follows:

Insular bonds:

Land purchase bonds sinking fund, Acts Nos. 2550 and 2592—	₱ 10, 902, 048. 37
Public improvement bonds sinking fund, Act No. 2425—	6, 700, 313. 67
Manila Railroad Co. purchase bonds sinking fund, Act No. 2625—	2, 504, 329. 67
Manila port works and improvement bonds sinking fund, Act No. 2908—	2, 438, 221. 21
Public improvement bonds of 1921 sinking fund, Act No. 2940—	6, 494, 907. 99
Irrigation and permanent public works bonds sinking fund, Act No. 3013—	3, 618, 698. 32
Financial interest protection bonds sinking fund, Act No. 2999—	1, 555, 323. 47
Currency bonds sinking fund, Act No. 3058—	7, 043, 285. 79
Metropolitan water district purchase bonds sinking fund, Act No. 3204—	458, 069. 99
Iloilo port works and improvement bonds sinking fund, Act No. 3417—	29, 819. 74
Cebu port works and improvement bonds sinking fund, Act No. 3413—	29, 904. 49
Total reserve for insular bonds.....	41, 774, 922. 78

Provincial and municipal bonds:

Manila sewer and waterworks bonds sinking fund, Act No. 1323—	5, 377, 206. 21
City of Manila public improvement bonds sinking fund, Act No. 2894—	1, 079, 407. 49
City of Manila lowland improvement bonds sinking fund, Act No. 3352—	19, 414. 90
Cebu sewer and waterworks bonds sinking fund, Act No. 2009—	112, 476. 64
Santa Cruz, Laguna, sewer and waterworks bonds sinking fund, Act No. 2773—	19, 283. 98
Majayjay, Laguna, sewer and waterworks bonds sinking fund, Act No. 2773—	8, 494. 70
Bangued, Abra, waterworks bonds sinking fund, Act No. 2838—	8, 499. 40
Province and 9 municipalities of Iloilo public improvement bonds sinking fund, Act No. 3222—	113, 289. 29

Provincial and municipal bonds—Continued.

Province of Pangasinan public improvement bonds sinking fund, Act No. 3228.....	₱48,750.48
Province of Occidental Negros public improvement bonds sinking fund, Act No. 3229.....	46,812.81
Province and 3 municipalities of Ilocos Norte public improvement bonds sinking fund, Act No. 3266.....	31,186.17
Province of Marinduque public improvement bonds sinking fund, Act No. 3268.....	6,564.28
Province of Laguna public improvement bonds sinking fund, Act No. 3265.....	7,694.02
Province of Ilocos Sur and municipality of Vigan public improvement bonds sinking fund, Act No. 3278.....	13,537.30
Province of Tarlac public improvement bonds sinking fund, Act No. 3279.....	13,192.73
Province and 4 municipalities of Camarines Sur public improvement bonds sinking fund, Act No. 3280.....	8,688.30
Province of Pampanga public improvement bonds sinking fund, Act No. 3282.....	36,938.62
Province of Nueva Ecija public improvement bonds sinking fund, Act No. 3329.....	26,415.62
Province of Bulacan public improvement bonds sinking fund, Act No. 3331.....	18,255.52
Province of La Union public improvement bonds sinking fund, Act No. 3281.....	4,148.98
 Total reserve for provincial and municipal bonds.....	 7,000,257.49
 Grand total.....	 48,775,180.27

The following statement shows the per capita indebtedness of the Philippine Islands from 1925 to 1929 on account of purely insular bonds:

Year	Amount of indebtedness of the insular government	Population ¹	Per capita indebtedness
1925.....	\$146,100,000	11,847,899	12.33
1926.....	146,100,000	12,108,688	12.06
1927.....	149,600,000	12,350,800	12.11
1928.....	152,600,000	12,597,800	12.11
1929.....	154,000,000	12,849,700	11.98

¹ Population estimated only, based on the 1918 census at a yearly increase of about 2 per cent.

INVESTMENTS

The following statement shows the status of the investments on December 31, 1928 and 1929, made from different funds under the control and custody of the insular treasurer:

Title of accounts and funds	Amount invested on—	
	Dec. 31, 1928	Dec. 31, 1929
General fund.....	₱74,491,361.69	₱72,146,217.08
Sinking funds:		
Land purchase bonds, Act No. 1749.....	9,997,000.00	10,679,000.00
Public improvement bonds of 1905, 1906, and 1909, Act No. 2425.....	6,079,000.00	6,227,000.00
Manila Railroad purchase bonds, Act No. 2625.....	2,078,000.00	2,414,000.00
Manila Port works and improvement bonds, Act No. 2908.....	1,842,000.00	2,132,500.00
Public improvement bonds of 1921, Act No. 2940.....	5,397,000.00	5,277,000.00
Financial interest protection bonds, Act No. 2999.....	1,165,000.00	1,490,000.00
Currency bonds, Act No. 3058.....	5,708,000.00	6,936,000.00
Irrigation and permanent public works bonds, Act No. 3013.....	2,890,000.00	3,553,000.00
Metropolitan water district purchase bonds, Act No. 3204.....	332,000.00	444,000.00
Cebu Port works and improvement bonds, Act No. 3413.....		28,000.00
Iloilo Port works and improvement bonds, Act No. 3417.....		28,000.00
City of Manila improvement bonds, Act No. 2894.....	820,000.00	966,500.00
Cebu waterworks bonds, Act No. 2009.....	102,000.00	108,000.00
Santa Cruz, Laguna, waterworks bonds, Act No. 2773.....	14,000.00	18,000.00
Majayjay, Laguna, waterworks bonds, Act No. 2773.....	6,000.00	7,000.00
Bangui, Abra, waterworks bonds, Act No. 2838.....	6,060.00	7,000.00
Province and 3 municipalities of Ilocos Norte improvement bonds, Act No. 3266.....	6,000.00	24,000.00
Province and 9 municipalities of Iloilo improvement bonds, Act No. 3222.....	60,000.00	102,500.00
Province of Marinduque improvement bonds, Act No. 3268.....	4,000.00	4,000.00
Province of Occidental Negros improvement bonds, Act No. 3229.....	28,000.00	45,000.00
Province of Pangasinan improvement bonds, Act No. 3228.....	30,000.00	46,000.00
Province of Laguna improvement bonds, Act No. 3265.....	2,000.00	7,000.00
Province of Bulacan improvement bonds, Act No. 3331.....	8,000.00	8,000.00
Province of La Union public improvement bonds, Act No. 3281.....		3,500.00
Manila sewer and waterworks bonds, Act No. 1323.....	4,863,832.50	5,256,712.50
City of Manila lowland improvement bonds, Act No. 3352.....		18,000.00
Province and 4 municipalities of Camarines Sur improvement bonds, Act No. 3280.....	2,000.00	2,500.00
Province of Ilocos Sur and municipality of Vigan improvement bonds, Act No. 3278.....	4,000.00	4,500.00

Title of accounts and funds	Amount invested on—	
	Dec. 31, 1928	Dec. 31, 1929
Sinking funds—Continued.		
Province of Nueva Ecija improvement bonds, Act No. 3329.....	₱12,000.00	₱26,000.00
Province of Pampanga improvement bonds, Act No. 3282.....	16,000.00	35,000.00
Province of Tarlac improvement bonds, Act No. 3279.....	4,000.00	11,000.00
Manila Railroad Co. Southern Line bonds, Act No. 2574.....	60,285.47	67,193.24
Special funds:		
Land title assurance fund, Act No. 496.....	67,297.60	287,297.60
Fidelity bond premium fund, secs. 313-355, Act No. 2711.....	45,000.00	45,000.00
Loan fund account, Acts Nos. 3335, 3420, and 3532.....	3,374,880.67	3,306,583.18
Property insurance fund, secs. 336-341, Act No. 2711.....		400,000.00
Total.....	119,454,647.91	122,161,003.60

The increase of ₱2,706,355.69 is due mainly to the acquisition of Philippine government bonds as investment of various sinking funds in accordance with the provisions of Act No. 3014, to additional subscription to the stocks of the Manila Railroad Co. under Act No. 3484, to additional advances to the Philippine Railway Co., and to the deposit in savings account with the Philippine National Bank of funds pertaining to the land title assurance fund and the property insurance fund.

Bonds in the total amount of ₱22,204,000 canceled under the provisions of Act No. 3014 are still carried as investments of the sinking funds concerned pursuant to section 2 of said act.

Guaranty of interest on bond issues of railway corporations.—Under authority of an act of congress approved February 6, 1905, the insular government guarantees 4 per cent interest, for a period not to exceed 30 years, on the first-lien bonds issued by the Philippine Railway Co. for the construction of certain lines in the islands of Panay and Cebu, and on the 4 per cent first-lien bonds of what are known as the southern lines of the Manila Railway Co.

On February 16, 1922, the Manila Railroad Co. again voted to issue 7 per cent sinking fund bonds in the sum of \$1,500,000, to mature on May 1, 1937, for the purpose of paying certain indebtedness, for the construction of certain lines; and to provide for a sinking fund to pay such bonds and interest thereon. To guarantee both the principal and interest of the issue the Philippine Legislature passed Act No. 3008 on February 28 of the same year.

The total of the combined issue of said companies on December 31, 1929, amounted to \$22,596,000 United States currency.

REJECTED AGRICULTURAL BANK LOANS

The outstanding loans on December 31, 1929, aggregated ₱53,902.89 as compared with ₱53,310.95 at the end of the year 1928 and represent loans rejected by the Philippine National Bank at the time said bank took over the assets and liabilities of the late Agricultural Bank in accordance with the provisions of section 6 of Act No. 2747, as amended by Act No. 2938, and those that have been subsequently returned by the Philippine National Bank as uncollectible, pursuant to section 7 of the above-mentioned act, as amended. No loan was returned by the Philippine National Bank during the year.

The increase in the amount of loans outstanding in 1929 over that in 1928, as shown above, is due to the fact that the invoice made to the bureau of lands of the real property foreclosed to the insular government on account of loan No. 424, in the amount of ₱3,000, was reduced by the insular auditor to ₱1,500 only, the amount for which the property was adjudicated to the government at public auction, and, therefore, the remaining portion thereof (₱1,500) was again taken up as outstanding in 1929 until it is definitely dropped from the account, either by further collection from the borrower or by action of the insular auditor under section 651 of the Revised Administrative Code. The difference between the amount newly taken up (₱1,500) and the amount of collections made in 1929 (₱908.06) represents the increase above referred to.

The following is a complete list of the outstanding loans at the close of business on December 31, 1929:

Loan No.	Principal	Interest	Total
263	₱15,000.00	₱2,983.64	₱17,983.14
275	6,000.00	428.37	6,428.37
417	7,500.00	386.62	7,886.62
424	1,500.00		1,500.00
673	11,000.00	4,624.86	15,624.86
983	4,479.40		4,479.40
Total	45,479.40	8,423.49	53,902.89

MINT OF THE PHILIPPINE ISLANDS

The mint was operated during the whole year of 1929 for the manufacture of 1-centavo, 10-centavo, and 20-centavo coins. Its output during the year amounting to ₱550,571.61 consisted of ₱56,571.61 1-centavo, ₱100,000 10-centavo, and ₱394,000 20-centavo pieces with a total cost of production of ₱61,871.99. Of the total output of ₱550,571.61, ₱478,512.22 represents the value of coins turned over to the mint for recoining. The ₱20,000 20-centavo pieces represent the amount recoined during the year. The ratio of expense to income is approximately 85.6 per cent as against 52½ per cent during 1928. This greatly increased cost of production was due to the recoining of ₱504,243.86 which permitted only of a small margin of profit.

REGISTRATION AND EXAMINATION OF SPECULATIVE CORPORATIONS

By virtue of Act No. 2581, as amended by Act No. 2817, the insular treasurer exercises supervision over corporations, persons, partnerships, and associations selling or proposing to sell speculative securities.

Pursuant to the provisions of the aforementioned law, seven corporations were granted permits during the year 1929 to sell securities as against one which was granted permit during the previous year. The names of said corporations and their places of business are given hereunder:

Philippine International Corporation, Manila; Matalin Coconut Co., Mala-bang, Lanao; Masonic Temple Association of Iloilo, Iloilo, Iloilo; University Building Corporation, Manila; Baguio Improvement and Development Corporation, Manila; Buad Development Co. (Inc.), Manila; Salacot Exploration Co., Manila.

MUTUAL-BENEFIT, RELIEF, AND BENEVOLENT SOCIETIES

The combined resources and liabilities, as of December 31, 1928, and receipts and disbursements during 1928, of the 287 mutual-benefit, relief, and benevolent societies which transacted business during the year 1928 and filed annual financial reports during the year 1929 are as follows:

Assets	₱600,425.08	Receipts	₱662,183.82
Liabilities	46,648.86	Disbursements	638,205.19
Net worth	553,776.54		

The combined resources and liabilities, as of the dates of examination, of 50 societies and 25 duly organized branches, are as follows:

Assets	₱371,549.21
Liabilities:	
Accounts payable	₱40,432.24
Benefit claims pending settlement	6,516.23
	46,948.47
Net worth	324,600.74

INSURANCE

On December 31, 1929, there were 67 companies authorized to engage in fire-insurance business, 60 in marine 7 in life, and 40 in miscellaneous insurance. The business done by said companies in the Philippine Islands as per statements filed with this office is as follows:

FIRE INSURANCE

	1928	1929
Net risks written	₱350,371,937.72	₱399,422,214.89
Net premiums received	4,161,339.67	4,336,819.22
Net losses incurred	2,075,275.75	2,755,080.19
Net losses paid	1,366,270.61	1,865,643.25
Ratio of losses incurred to premiums received	49.9	63.5

MARINE INSURANCE

	1928	1929
Net risks written.....	₱420,575,380.39	₱417,424,934.87
Net premiums received.....	1,663,299.77	1,710,747.42
Net losses incurred.....	1,432,010.73	1,592,384.69
Net losses paid.....	511,550.80	554,923.45
Ratio of losses incurred to premiums received..... per cent.....	25.9	34.6

¹ Excluding losses not yet ascertained.

LIFE INSURANCE *

	1927	
Insurance in force, Jan. 1, 1927.....		₱73,737,592.00
Insurance issued, revived, and increased during the year:		
Number.....		7,961
Amount.....		₱23,182,922.00
Insurance terminated.....		₱14,378,328.00
Policies in force, Dec. 31, 1927:		
Number.....		25,619
Amount.....		₱82,508,186.00
Claims paid.....		₱1,594,477.00
Losses and claims unpaid Dec. 31, 1927.....		₱326,222.00
	1928	
Insurance in force, Jan. 1, 1928.....		₱82,482,186.00
Insurance issued, revived and increased during the year:		
Number.....		8,175
Amount.....		₱28,939,744.00
Insurance terminated.....		₱15,865,565.00
Policies in force, Dec. 31, 1928:		
Number.....		27,965
Amount.....		₱95,556,365.00
Claims paid.....		₱1,857,425.18
Losses and claims unpaid, Dec. 31, 1928.....		₱321,504.64

MISCELLANEOUS INSURANCE

	1928	Health, accident, and casualty	Motor vehicles, motor car, and automobile	Fidelity and surety	Plate glass
Net risks written.....	₱607,500.00	₱4,914,497.12	₱19,560,425.97		
Net premiums received.....	4,398.79	173,021.50	389,476.77	₱2,658.27	
Net losses incurred.....	90.00	105,424.75	24,682.91	100.76	
Net losses paid.....	90.00	106,270.74	24,682.91	100.76	
Ratio of losses incurred to premiums received, per cent.....	2.0	60.9	6.3	3.8	
1929					
Net risks written.....	₱512,500.00	₱5,432,024.25	₱18,802,156.83	₱1,000.00	
Net premiums received.....	3,624.18	195,245.39	485,224.70	3,277.17	
Net losses incurred.....	10,230.34	103,737.62	22,703.71	145.00	
Net losses paid.....	230.34	97,073.21	22,153.71	145.00	
Ratio of losses incurred to premiums received, per cent.....	282.3	53.1	4.7	4.4	

	1928	Typhoon, flood, and earthquake	Workmen's compensation and employers' liability	Others
Net risks written.....	₱19,757,555.20	₱3,771,932.89	₱15,302,617.00	
Net premiums received.....	55,950.34	161,887.75	72,905.51	
Net losses incurred.....	42,156.32	19,673.60	300.00	
Net losses paid.....	69,998.82	5,487.70	300.00	
Ratio of losses incurred to premiums received, per cent.....	75.3	12.2		.4
1929				
Net risks written.....	₱30,522,826.00	₱3,328,002.37	₱14,444,950.00	
Net premiums received.....	80,530.29	137,424.89	73,491.77	
Net losses incurred.....		1,56,050.60	1,10,105.00	
Net losses paid.....	2 (71.50)	40,035.36	10,105.00	
Ratio of losses incurred to premiums received, per cent.....	0	40.8		13.8

¹ Excluding losses not yet ascertained.

² Excess of salvage received over losses paid.

* The data for 1929 are not available at the writing of this report.

The business done during 1929 by domestic insurance companies as compared with that done by foreign companies is as follows:

	1929	
	Domestic	Foreign
Life insurance, 1928:		
Number of companies.....	2	5
Insurance issued, revived and increased—		
Number.....	3,617	4,558
Amount.....	₱8,808,780.00	₱20,130,964.00
Insurance terminated.....	₱6,822,245.00	₱0,043,320.00
Policies in force—		
Number.....	10,799	17,166
Amount.....	₱27,011,108.00	₱68,545,257.00
Claims paid.....	₱353,105.00	₱1,504,320.18
Fire insurance:		
Number of companies.....	5	62
Net risks written.....	₱57,335,232.20	₱342,086,982.69
Gross premiums received.....	₱743,481.27	₱4,431,071.15
Net premiums received.....	₱537,275.52	₱3,799,543.70
Net losses incurred.....	₱146,889.74	₱2,608,190.45
Net losses paid.....	₱134,510.41	₱1,731,132.82
Marine insurance:		
Number of companies.....	6	54
Net risks written.....	₱17,452,576.68	₱399,972,358.19
Gross premiums received.....	₱132,970.35	₱1,756,609.09
Net premiums received.....	₱122,240.38	₱1,588,507.04
Net losses incurred.....	₱79,064.66	₱513,320.03
Net losses paid.....	₱78,902.09	₱476,021.36
Miscellaneous insurance:		
Number of companies.....	6	34
Net risks written.....	₱19,964,406.83	₱53,079,052.62
Net premiums received.....	₱501,019.80	₱477,798.59
Net losses incurred.....	₱33,672.53	₱169,299.74
Net losses paid.....	₱33,122.53	₱136,548.59

EXAMINATION OF DOMESTIC COMPANIES

The combined resources and liabilities, as of the dates of examination, of the six domestic insurance companies examined by the insurance commissioner during the year, pursuant to the provisions of section 174 of the insurance law, are as follows:

Gross assets.....	₱18,859,305.09
Admitted assets.....	18,387,615.43
Liabilities, excluding capital and surplus.....	9,751,448.77
Capital.....	4,013,100.00
Surplus.....	4,623,066.66

BUSINESS OF UNAUTHORIZED COMPANIES

Under the provisions of section 192 of the insurance law, five duly authorized insurance agents procured, during 1929, for companies not authorized to transact business in this country, insurance to the total sum of ₱12,560,587.73 on risks located here, and collected for the companies premiums amounting to ₱54,947.52 as compared with ₱12,492,116.73 and ₱50,898.97, respectively, the corresponding figures for the preceding year.

DEPOSITS REQUIRED BY LAW

The securities deposited by foreign insurance companies doing business in the Philippine Islands in compliance with section 178 of the insurance law consisted, on December 31, 1929, of the following:

Certificate of deposit issued by local banks, in Philippine pesos.....	1,860,000.00	Bonds, in Hong Kong dollars.....	80,000.00
Bonds, in gold dollars.....	1,295,000.00	Bonds, in pounds sterling.....	64,670/0.0/
Bonds, in Philippine pesos.....	343,000.00	Bonds in yens.....	95,000.00

Bonds, in Philippine pesos..... 239,167.94

BUREAU OF CUSTOMS

CUSTOMS RECEIPTS AND EXPENDITURES

The total net customs collections for the year 1929 amounted to ₱26,056,232.72 as compared with ₱23,418,653.94 in 1928, which shows an increase of ₱2,657,578.78 representing 10 per cent of the total customs collections. The increase is largely attributed to the increment in the importations of rice. The cost to the service for collecting a peso of customs revenue reached the amount of ₱0.044 only in 1929, which is the lowest figure in the history of the bureau of customs, with the exception of the first three years of the American occupation.

The principal sources of collections for 1929 are specified in the following tables:

	1929	1928	Increase (+) or decrease (-)
By ports:			
Manila.....	₱20,562,965.04	₱19,577,073.40	+₱985,891.64
Iloilo.....	1,976,479.40	1,540,835.19	+435,644.21
Cebu.....	3,136,773.40	2,221,788.24	+914,985.16
Jolo.....	118,623.74	121,310.08	-2,686.34
Zamboanga.....	343,962.09	245,923.50	+98,038.59
Davao.....	349,861.08	224,697.35	+125,163.73
Legaspi.....	155,314.23	119,523.34	+35,790.89
Total.....	26,643,978.98	24,051,151.10	+2,592,827.88
By sources:			
Import duties.....	21,335,040.93	19,511,230.79	+1,823,810.14
Wharfage.....	3,069,785.15	2,578,846.60	+490,938.55
Immigration dues.....	369,088.00	323,856.00	+45,232.00
Tonnage dues.....	464,806.83	395,669.60	+69,137.23
Customs stamps.....	718,535.72	659,201.22	+59,334.50
Miscellaneous taxes (United States collection).....		16,956.52	-16,956.52
Fines and forfeitures.....	76,795.28	68,845.12	+7,950.16
Storage.....	43,876.49	28,309.16	+15,567.33
Surplus, auction sales.....	8,113.62	11,370.53	-3,256.91
Arrastre collections.....	8,825.69	8,021.07	+804.62
Government pier collections.....	175,119.18	147,312.15	+27,777.03
Various other sources.....	373,992.09	301,492.34	+72,499.75
Total.....	26,643,978.98	24,051,151.10	+2,592,827.88
Refunds.....	587,746.26	632,497.16	-44,750.90
Net total.....	26,036,232.72	23,418,653.94	+2,637,578.78

INTERNAL-REVENUE COLLECTIONS

Internal-revenue taxes on imported merchandise subject to the payment of said tax collected by this bureau during the year reached the sum of ₱4,513,003.63 as compared with ₱4,228,324.56 in 1928, showing an increase of ₱284,679.07. This is due to increased importations of articles subject to the payment of internal-revenue tax.

HIGHWAYS SPECIAL FUND COLLECTIONS

The sum of ₱3,997,957.68 was levied on lubricating oils, naphtha, gasoline, and all other lighter products of distillation during the year under review as against ₱3,650,533.48 in 1928, which shows an increase of ₱367,424.20. The tax collected on these products constitutes, under Act No. 3248 of the Philippine Legislature, a separate fund, known as the "highway special fund" for the maintenance, improvement, and construction of provincial and insular roads and bridges.

FOREIGN COMMERCE

The year 1929 closed with a balance of trade in favor of the islands in the sum of ₱34,573,136. The total value of our foreign trade during the year reached the amount of ₱623,214,234, of which ₱294,320,549 represents the imports and ₱328,893,685 the exports, as against ₱579,422,888 in 1928, of which ₱269,313,796 constituted the imports and ₱310,109,092 the exports.

TRADE WITH THE UNITED STATES

The percentage of 69.51 of the total trade of the Philippine Islands during 1929 was carried on by this country with the United States amounting to ₱434,116,863 or ₢33.76 per capita. The importations from the United States amounted to ₱185,185,917, representing 62.92 per cent of the total importations of the islands, as compared with ₱167,716,135 in 1928, while the exports thereto amounted to ₱248,930,946, representing 75.69 per cent of the total exports of the Philippine Islands, as against ₱231,171,751 in 1928. The balance of trade with the United States is, therefore, in favor of the Philippine Islands.

TRADE WITH COUNTRIES OTHER THAN THE UNITED STATES

Next to the United States, the largest volume of our trade was carried with Japan, representing 6.12 per cent of the total trade, followed by Great Britain, 4.09 per cent; China, 3.30 per cent; Germany, 2.70 per cent; and Spain, 2.20 per cent. The origin of our imports and the destinations of our exports are shown in the following table:

Countries of origin of imports and destinations of exports	1929		1928	
	Imports	Exports	Imports	Exports
United States.....	₱185,185,917	₱248,930,946	₱167,716,135	₱231,171,751
Hawaii.....	1,147,467	1,660,974	819,145	704,630
Guam.....	163,346	375,678	181,720	556,914
Porto Rico.....		950		1,993
Japan.....	23,879,095	14,259,084	25,861,753	13,944,735
Great Britain.....	11,455,713	14,078,707	11,297,361	15,792,135
China.....	14,185,585	6,378,951	13,119,487	7,008,296
Germany.....	9,726,107	7,111,189	9,249,902	6,507,305
Spain.....	1,828,064	12,444,518	1,855,106	10,183,918
French East Indies.....	11,541,652	86,243	4,802,625	101,486
British East Indies.....	7,187,020	2,216,337	6,004,675	2,357,519
France.....	3,267,960	4,509,416	3,129,576	5,406,855
Dutch East Indies.....	6,342,541	637,774	6,070,269	669,066
Australia.....	4,288,649	1,151,009	4,867,561	1,253,280
Italy.....	650,104	4,229,110	766,514	3,057,364
Belgium.....	2,509,397	2,066,741	2,916,033	2,796,782
Netherlands.....	1,160,670	2,976,303	1,068,424	2,931,899
Switzerland.....	3,361,621	86,362	3,315,550	28,593
Hong Kong.....	365,179	2,325,719	696,452	2,697,073
Japanese-China.....	1,841,413	26,786	1,325,859	63,876
Sweden.....	676,656	846,254	624,100	482,296
Canada.....	557,808	591,180	797,845	438,381
Norway.....	267,032	607,532	312,050	580,284
Denmark.....	145,570	617,390	166,894	255,040
Siam.....	282,634	292,736	180,298	260,319
Ireland.....	461,789	522	496,941	40
Austria.....	126,773		220,898	
Other countries.....	1,745,787	1,407,274	1,450,553	1,077,262
Total.....	294,320,549	328,893,685	269,313,796	310,109,092

PRINCIPAL ARTICLES IMPORTED

In the order of their importance as to value, the 10 principal articles imported by the islands during the year are as follows:

1. *Cotton and its manufacture.*—Eighteen per cent of the total importations of the Philippine Islands during the year consists of cotton and its manufactures, the value of which amounted to ₱53,953,812 as against ₱56,272,304 in 1928, showing a decrease of 4 per cent over similar importations in 1928. The principal source of cotton goods imported in the islands is the United States, 58.74 per cent of the total having been imported from that country valued at ₱31,697,057. Japan and Great Britain come next, with Switzerland and China ranking fourth and fifth, respectively.

2. *Iron and steel and their manufactures.*—Fifteen per cent of the total importations of the islands consists of iron and steel and their manufactures amounting to ₱43,812,351 in 1929 as compared with ₱40,296,562 in 1928, showing an increase of 9 per cent over similar importations in 1928. Eighty-one and seventeen one-hundredths per cent of the islands' supply of iron and steel and their manufactures, valued at ₱35,559,922, came from the United States; 7.69 per cent, valued at ₱3,368,220 from Germany; and the rest from other countries.

3. *Mineral oils.*—Mineral oils imported during the year constitute 7 per cent of the islands' total importations, showing an increase of 13 per cent over imports of the same product in 1928, the value of mineral oils imported in 1929 having been ₱19,838,058 as against ₱17,608,298 in 1928. Eighty-four and seventy-seven hundredths per cent of this imported product, valued at ₱16,814,381, came from the United States and the rest from other countries.

4. *Automobiles, parts of, and tires for.*—Five per cent of our total importations consists of automobiles and accessories and tires, showing an increase of 15 per cent over similar importations in 1928. The value of this product imported in 1929 having been ₱15,271,455 as against ₱13,292,723 in 1928. Ninety-eight and eighty-three one-hundredths per cent of this product, valued at ₱15,091,886, came from the United States and the rest from other countries.

5. *Meat and dairy products.*—Five per cent of our total importations during the year consists of meat and dairy products, showing an increase of 3 per cent over similar imports in 1928. The total value of these products imported during 1929 amounted to ₱13,787,193 as compared with ₱13,346,159 in 1928. Fifty-three and twenty-five one-hundredths per cent of these imported products, valued at ₱7,341,123, came from the United States; 16.75 per cent, valued at ₱2,307,044, from Australia; 15.04 per cent, valued at ₱2,073,741 from China; and the rest from other countries.

6. *Rice.*—Rice constitutes 4 per cent of the total importations of the islands during the year, showing a great increase of 138 per cent as compared with the previous year. The value of rice imported during 1929 amounted to ₱11,620,026 as against ₱4,880,727 in 1928. Ninety-six and seventy-eight one-hundredths per cent of this imported product, valued at ₱11,246,290, came from French East Indies and the rest from other countries.

7. *Wheat flour.*—Three per cent of the total importations of the Philippine Islands during 1929 consists of wheat flour, showing a decrease of 5 per cent over similar product imported in 1928, the value of this product imported in 1929 having been ₱10,120,155 as compared with ₱10,650,603 in 1928. Eighty-five and ninety-four one-hundredths per cent of wheat flour imported during the year, valued at ₱8,696,878, came from the United States; 10.47 per cent, valued at ₱1,059,970, from Australia; and the rest from other countries.

8. *Silk and its manufactures.*—Three per cent of our total imports constitutes these articles, showing an increase of 10 per cent over imports of similar products in 1928. The value of these products imported during 1929 reached the amount of ₱9,328,442 as against ₱8,512,739 in 1928. Forty-three and sixty-one one-hundredths per cent of these imported products, valued at ₱4,067,759, came from the United States; 35.28 per cent, valued at ₱3,291,361, from Japan; 13.95 per cent, valued at ₱1,301,470, from China; and the rest from other countries.

9. *Paper and its manufactures.*—These articles constitute 3 per cent of our total importations during 1929, which show an increase of 2 per cent over imports of similar products in 1928. The total value of our imports of these products reached the amount of ₱8,454,247 in 1929 as compared with ₱8,257,529 in 1928. Seventy-two and seven hundredths per cent of these products imported during 1929, valued at ₱6,093,575, came from the United States; 6.28 per cent, valued at ₱531,310, from Germany; 4.92 per cent, valued at ₱416,085, from Spain; and the rest from other countries.

10. *Electrical machinery, apparatus, and appliances.*—The importations of these articles constitute 2 per cent of the total imports of the islands, showing an increase of 71 per cent over similar imports in the preceding year. The value of these imported products during the year reached the sum of ₱7,460,050 as compared with ₱4,370,059 in 1928. Eighty-four and twenty hundredths per cent of these articles imported during 1929, valued at ₱6,279,801, came from the United States; 5.32 per cent, valued at ₱397,032, from Great Britain; and the rest from other countries.

Other imports.—Articles other than the 10 principal ones above mentioned, having a total value of ₱100,674,780, have also been imported into the Philippine Islands during the year under review, showing an increase of 12 per cent compared with the value of similar goods imported in 1928.

PRINCIPAL ARTICLES EXPORTED

In the order of their importance as to value the 10 principal local products exported during the year are as follows:

1. *Sugar.*—Thirty-two per cent of our total exportations during the year constitutes this article, the value of sugar exported having reached the sum of ₱106,488,298 as compared with ₱95,085,879 in 1928, or an increase of 12 per cent.

Ninety-seven and ninety-five hundredths per cent of sugar exported during 1929, valued at ₱104,307,859, went to the United States and the rest to other countries.

2. *Coconut oil*.—The second largest item of our exports is coconut oil, the value of the shipment sent abroad during the year having been ₱58,369,883 as compared with ₱46,978,345 in 1928, which shows an increase of 24 per cent and represents 18 per cent of our total exports. Ninety-nine and three hundredths per cent of our exports of this product during the year, valued at ₱57,801,174, went to the United States and the rest to other countries.

3. *Abaca (Manila hemp)*.—The value of abaca exported during the year reached the sum of ₱56,841,100 as against ₱53,187,212 in 1928, or an increase of 7 per cent. Forty-three and twenty hundredths per cent of our abaca exports went to the United States, 20.99 per cent to Great Britain, and 18.82 per cent to Japan, valued at ₱24,552,726, ₱11,932,744, and ₱10,700,169, respectively.

4. *Copra*.—Copra exports during the year registered a decrease of 31 per cent from ₱45,084,682 in 1928 to ₱31,131,641 in 1929. Seventy-three and fifty hundredths per cent of our copra exports, valued at ₱22,881,796, went to the United States; 19.06 per cent, valued at ₱5,934,819, to Spain; 5.4 per cent, valued at ₱1,681,103, to France; and the rest to other countries.

5. *Tobacco products*.—An increase of 3 per cent has been registered in the exportations of these domestic products during the year. The value of tobacco products exported during 1929 amounted to ₱17,579,888 as against ₱17,142,878 in the preceding year. Thirty-eight and ninety-six hundredths per cent of these products exported during the year, valued at ₱6,849,684, went to the United States; 31.17 per cent, valued at ₱5,653,956, to Spain; 6.24 per cent, valued at ₱1,096,813, to Italy; and the rest to other countries.

6. *Embroideries (cotton and silk)*.—Our embroidery exports registered an increase of 35 per cent from ₱9,047,936 in 1928 to ₱12,023,065 in 1929. Ninety-nine and eighteen hundredths per cent of our embroideries, valued at ₱11,924,186, was exported to the United States and the rest to other countries.

7. *Copra meal or cake*.—Our exports of copra meal during the year registered an increase of 31 per cent over similar exportations in the preceding year; the value thereof exported in 1929 having been ₱7,585,573 as against ₱5,772,274 in 1928. Sixty-nine and thirty-one hundredths per cent of our copra meal exported during the year, valued at ₱5,257,471, went to Germany; 10.74 per cent, valued at ₱814,340, to the United States; and the rest to other countries.

8. *Lumber*.—During the year the value of lumber exported is ₱7,237,918 as compared with ₱6,253,001 in 1928, which shows an increase of 15 per cent. Forty-nine and forty-four one-hundredths per cent of our exports of lumber, valued at ₱3,572,258, went to the United States; 19.35 per cent, valued at ₱1,400,699, to Japan; 15.8 per cent, valued at ₱1,143,202, to China; and the rest to other countries.

9. *Desiccated coconut*.—The value of our exports of this product during the year reached the sum of ₱7,080,247 as compared with ₱7,447,171 in 1928, showing a decrease of 5 per cent. Ninety-nine and ninety-one one-hundredths per cent of our exports of desiccated coconut, valued at ₱7,074,007, went to the United States, the portion sent to other countries being negligible.

10. *Hats*.—The exports of hats during the year registered a decrease of 39 per cent, the value of this product exported in 1929 having been ₱4,097,457 as against ₱6,717,925 in 1928. Seventy-five and fifty-three one-hundredths per cent of our exports of hats, valued at ₱3,094,840, went to the United States, 12.35 per cent, valued at ₱506,047, to the United Kingdom, 7.01 per cent, valued at ₱287,528, to France, and the rest to other countries.

Other exports.—The value of all other exports other than the 10 above mentioned reached the amount of ₱20,458,615, which represents an increase of 16 per cent as compared with all exports in 1928 exclusive of the 10 principal ones for that year.

FOREIGN CARRYING TRADE

The prominence of American vessels in the foreign carrying trade of the islands held in previous years has been maintained during the year under review. The value of imports and exports carried by American bottoms amounted to ₱278,913,788 in 1929 as against ₱263,513,136 in 1928, which shows an increase of over ₱15,000,000; the British ships again ranked second, having carried goods to the value of ₱175,029,376, which, as compared with 1928, marked a decrease of over ₱11,000,000, the value of merchandise carried by British bottoms during that year having been ₱186,279,790. The Japanese vessels stood third as in

previous years, having carried goods valued at ₱50,580,385 as against ₱40,249,821 in 1928. German ships come next, having carried merchandise to the value of ₱29,588,982 as compared with ₱28,713,314 in 1928. The following is a comparative statement of the values of trade carried by, and the number and tonnage of vessels of different nationalities calling at Philippine ports:

Nationality of vessels	1929		1928	
	Amount	Per cent	Amount	Per cent
American.....	₱278,913,788	44.75	₱263,513,136	45.50
British.....	175,029,376	28.08	186,279,790	32.16
Japanese.....	50,580,385	8.11	40,249,821	6.96
German.....	29,588,982	4.75	28,713,314	4.90
Norwegian.....	29,496,557	4.73	13,949,417	2.41
Dutch.....	16,046,732	2.57	13,600,855	2.35
Danish.....	15,436,053	2.54	2,148,925	.37
Swedish.....	3,973,952	.63	4,175,358	.73
Spanish.....	3,053,027	.48	3,242,269	.56
Philippine.....	2,098,146	.33	3,597,946	.62
All other.....	2,312,201	.37	1,440,634	.25
Total by freight.....	606,529,199	97.34	560,911,463	96.81
Total by mail.....	16,685,035	2.66	18,511,425	3.19
Total trade.....	623,214,234	100.00	579,422,888	100.00

1929

Nationality of vessels	Vessels entered		Vessels cleared	
	Number	Net tonnage	Number	Net tonnage
American.....	359	1,783,378	335	1,604,455
Philippine.....	24	62,936	27	67,241
Belgian.....	1	3,169	1	3,169
British.....	481	1,706,119	501	1,770,946
Chinese.....	49	94,880	42	82,728
Danish.....	25	52,874	24	49,621
Dutch.....	101	393,455	102	304,748
Finnish.....	2	7,084		
French.....			1	1,132
German.....	143	607,043	139	593,818
Italian.....	1	2,874	1	2,874
Japanese.....	217	627,620	194	564,568
Norwegian.....	83	213,194	84	214,825
Panaman.....	2	7,976	1	3,988
Spanish.....	3	7,185	5	7,185
Swedish.....	19	67,361	19	66,233
Total.....	1,510	5,617,148	1,474	5,507,531

1928

American.....	232	1,212,791	218	1,171,818
Philippine.....	50	128,954	57	135,856
British.....	412	1,493,001	412	1,491,847
Chinese.....	11	16,311	11	16,311
Czechoslovakian.....	2	2,240	2	2,240
Danish.....	3	6,877	3	6,877
Dutch.....	76	261,900	75	263,908
French.....	3	3,396	2	2,264
German.....	144	589,026	138	570,825
Norwegian.....	66	145,579	68	147,947
Japanese.....	137	438,218	138	443,600
Spanish.....	3	7,185	3	7,185
Swedish.....	7	21,765	7	21,765
Total.....	1,146	4,325,243	1,134	4,282,443

The policy of permitting vessels of foreign registry to call at Philippine ports other than ports of entry has been continued during the year under review. The most important products taken from these ports are sugar, copra, and lumber. In Manila collection district, Philippine products were taken from Candon (Ilocos Sur), Casiguran (Tayabas), Guinayangan (Tayabas), Hondagua (Tayabas), Hook Bay (Tayabas), Polillo (Tayabas), Port Real (Tayabas), St. Lucia (Ilocos Sur), and Siaian (Tayabas) to the value of ₱1,492,916; from Legaspi collection district, local products were taken from Aroroy (Masbate), Bulan (Sorsogon), Gubat (Sorsogon), Katabangan (Camarines Sur), Lamit Bay (Camarines Sur), Masbate, (Masbate), Paracale (Camarines Norte), Tabaco (Albay), and Sabang, (Camarines Sur) to the value of ₱1,336,049; from Iloilo collection district, products were taken from Bongabong (Mindoro), Cadiz (Occidental Negros), Manapla (Occidental Negros), Mangarin (Mindoro), Odiongan (Romblon), Pulupandan (Occidental Negros), Romblon (Romblon), Sagay (Occidental Negros), San Carlos (Occidental Negros), and Sumagui, (Mindoro) the aggregate value of which amounted to ₱27,666,596; from Cebu collection district, products were taken from Bais (Oriental Negros), Cagayan (Misamis), Ginggoog (Misamis), Iligan (Misamis), Kulambungan (Lanao) and Tacloban (Leyte), the total value of which amounted to ₱3,894,501; from Zamboanga collection district, local products were taken from Latauan (Zamboanga), Margosatubig (Zamboanga), Milbuk (Cottabato), Naga Naga (Zamboanga), Olutanga (Zamboanga), Panabutan (Zamboanga), Port Banga (Zamboanga) and Port Holland (Basilan) the total value of which amounted to ₱493,268; and from Jolo collection district, miscellaneous products were taken at Sitanki (Sulu) valued at ₱13,214.

DOCUMENTATION AND LICENSING OF VESSELS FOR THE PORT OF MANILA

A total of 318 vessels with an aggregate net tonnage of 18,123.95 were newly documented during the year 1929, as against 213 vessels for the year 1928 with an aggregate net tonnage of 6,870.67.

Coastwise licenses were issued to 170 steam and motor vessels having an aggregate net tonnage of 36,354.48, and to 561 vessels not propelled by either steam or other mechanical motive power having an aggregate net tonnage of 21,453.29. Bay and river licenses were issued to 1,593 miscellaneous vessels for the bay and river traffic with an aggregate net tonnage of 46,624.72.

COASTWISE ENTRANCE AND CLEARANCE

Throughout the year 21,785 coastwise vessels with a total net tonnage of 3,373,372 entered the various ports of entry as compared with 20,763 coastwise vessels with an aggregate net tonnage of 2,891,270 in 1928. During the same period, 22,115 coastwise vessels were cleared from the different ports of entry with an aggregate net tonnage of 3,379,350 as compared with 20,986 coastwise vessels with a total net tonnage of 2,849,431 cleared in 1928. It is gratifying to note that in all ports of entry the number and tonnage of coastwise vessels which entered and cleared therefrom registered an increase during the year under review.

The following table shows a comparative statement of the entrance and clearance of vessels engaged in the coastwise trade at the ports of entry of the Philippine Islands:

ENTERED

Ports of entry	1929		1928	
	Number	Net tonnage	Number	Net tonnage
Manila	3,568	953,852	3,370	861,687
Iloilo	8,417	801,849	8,032	786,366
Cebu	7,499	931,740	7,344	763,688
Jolo	278	106,869	224	44,626
Zamboanga	1,427	375,326	1,196	258,864
Davao	117	93,193	79	48,998
Legaspi	479	130,843	518	107,041
Total	21,785	3,373,372	20,763	2,891,270

CLEARED

Ports of entry	1929		1928	
	Number	Net tonnage	Number	Net tonnage
Manila.....	3,750	958,452	3,434	863,630
Iloilo.....	8,443	805,650	7,899	733,707
Cebu.....	7,620	914,420	7,617	741,684
Jolo.....	280	107,499	229	45,507
Zamboanga.....	1,427	574,953	1,210	258,592
Davao.....	117	93,101	78	48,516
Legaspi.....	478	130,275	519	107,795
Total.....	22,115	3,379,350	20,986	2,849,431

INSPECTION OF VESSELS

A total of 315 vessels of all kinds with an aggregate gross tonnage of 89,617.56 were inspected during the year at the port of Manila, in accordance with the requirements of navigation and steamboat inspection service, as compared with 260 vessels representing a total gross tonnage of 80,948.40 inspected during 1928. During the same period 303 vessels with a total gross tonnage of 20,087.06 were admeasured in said port.

MARINE OFFICERS

During the year 1929 253 applicants, all Filipinos, applied for admission to marine officers' and marine engineers' examinations, of whom 252 actually took the examination and 1 withdrew therefrom. Of those examined 158 were successful and 94 failed to obtain the required ratings to pass. During the same period 210 certificates were issued, of which 129 were for any ocean, 5 for coastwise, and 76 for limited coastwise.

MARINE ACCIDENTS

Of the 27 marine accidents of vessels of domestic ownership in Philippine waters registered during the year 1929, there were 7 collisions, 8 groundings, 3 fires, 3 sinkings and the rest were due to miscellaneous causes of little or no importance. Of these 27 marine accidents, 8 were due to fortuitous causes, and 2 to the negligence of marine officers. Of the collision cases, 2 were found to have been due to negligence of officers, and 5 were amicably settled without customs intervention.

The total loss of the steamships *Viking* and *Port Lebak* by fire, the grounding of the steamship *Bohol* and the sinking of the steamship *Mayon* of the Manila Railroad Co. were the accidents of notable importance. The steamship *Viking* was burned at sea on the afternoon of April 28, 1929, between Tanguingue Light and Guintaca Island, resulting in the loss of 17 lives, including the chief engineer and second officer, and the total loss of the vessel. The cause of the fire was partly attributed to the negligence of the master and chief officer. The steamship *Port Lebak* caught fire of unknown origin while moored at the wharf in Culion on March 23, 1929. Of the eight cases of groundings, that of the steamship *Bohol*, which took place in the night of March 9, 1929, off Matabao Light, Masbate, while said vessel was navigating for Manila from the Visayan Islands, was considered of importance owing to the loss of considerable amount of cargo and the total loss of the vessel. The cause of the grounding was attributed to force majeure. The steamship *Mayon* of the Manila Railroad Co. sunk during a typhoon on September 2, 1929, off the coast of Ragay Gulf, resulting in the loss of 18 lives, including the captain and all the officers.

CONSULAR SERVICE

During the year 1929, there were 409 American seamen discharged at the port of Manila from vessels of the United States registry, consisting of 112 Americans, 283 Filipinos, 4 Europeans, 8 Chinese, and 2 Hawaiians, as against 391, composed of 171 Americans, 191 Filipinos, 5 Europeans, 21 Chinese, 1 Hawaiian, and 2 Porto Ricans for the year 1928. There were 79 seamen left in the marine hospital on account of illness contracted in line of duty, consisting of 73 Americans, 5 Europeans, and 1 Filipino, as against 37, composed of 35 Americans, 1 European,

and 1 Porto Rican for the year 1928. During the year, there were 125 American seamen who were not regularly discharged before this office, but who for one reason or another, were left behind, or voluntarily left their ships, as against 94 for the year 1928. Seventy-seven seamen, all Chinese, were transferred from one American vessel to another of the same registry, as against 32 of the preceding year.

Six hundred and sixty-five seamen were shipped out, consisting of 195 Americans, 314 Filipinos, 9 Chinese, 5 European, 2 Hawaiians, and 140 of various nationalities, as against 373, composed of 122 Americans, 160 Filipinos, 2 Chinese, 4 Javanese, and 85 of various nationalities for the year 1928.

The sum of P44,770.92 as wages due American seamen who were regularly discharged before this office was collected, as against P40,602.54 of the preceding year. This whole amount was paid to seamen entitled thereto.

There were 168 consular invoices and 492 invoices of returned American goods issued by this office during the year, as compared with 153 consular invoices and 461 invoices of returned American goods in 1928.

IMMIGRATION AND EMIGRATION

The passenger movement during the year 1929 has registered an increase as compared with that of the previous year. A total of 35,611 persons arrived as and 43,889 departed from the Philippine Islands, exclusive of the enlisted men and others attached to the military and naval forces of the United States. During 1928, 35,991 persons arrived in and 41,725 departed from this country.

Of those who arrived in the islands, 5,225 were citizens of the United States, 9,352 Filipinos, and 43 Hawaiians and other American nationals. Of the Americans, 2,643 came from the United States and insular possessions and 2,582 from foreign countries. As to the Filipinos who returned from abroad, 5,816 came from the United States and insular possessions and 3,536 from other countries. Of the aliens who arrived, 15,306 were Chinese, 3,478 Japanese, 679 English, 404 Spaniards, 215 East Indians, 174 Germans, 105 Dutch and Flemish, 104 Russians, 81 French, 77 Scotch, 41 Scandinavians, 41 Portuguese, 28 Irish, 20 Italian, 8 Syrians, 3 Turkish, and other nationals 227. Of the Chinese who arrived during the year, 35 came from the United States and insular possessions and 15,271 from foreign countries, and 6,534 were immigrants and 8,737 nonimmigrants. Of the Japanese who arrived, 3,048 were immigrants and 418 nonimmigrants.

Of those who left the country, 3,785 were Americans, 21,924 Filipinos, 6 Hawaiians, and 8 other American nationals. The number of aliens who departed from the islands is distributed as follows: 14,578 Chinese, 1,457 Japanese, 757 English, 404 Spaniards, 165 Germans, 152 East Indians, 92 French, 86 Dutch and Flemish, 79 Italians, 70 Russians, 36 Scandinavians, 32 Portuguese, 10 Irish, 10 Scotch, 10 Syrians, and 228 other aliens.

Of the Filipinos who departed, 17,673 went to the United States and insular possessions and 4,251 to other countries.

As to the Chinese who left the islands, 121 were emigrants, 14,451 nonemigrants, and 6 departed for the United States. Among the nonemigrants were 1,312 Chinese who returned voluntarily to their country after a sojourn in the Philippine Islands. Of the Japanese, 1,023 were emigrants and 434 nonemigrants.

A total of 192 aliens were debarred from admission into this country during the year, of whom 175 were Chinese, 12 East Indians, 1 English, and 4 Japanese. Twenty-nine Chinese were deported by order of competent authority, 24 of whom were for violation of act No. 2381 (opium law) and 5 for violation of act No. 702, and 1 Russian.

PROTESTS AND APPEALS

During the year 1929, there were lodged with the board of protests and appeals in Manila 191 protests against the classification and appraisal of imported merchandise, collection of customs duties, internal revenue taxes, wharfage taxes, fines, forfeiture of immigration bonds, etc., under the provisions of section 1370 of the administrative code. Six protests were overruled and denied, 9 sustained, 8 dismissed, and 168 were pending decision at the close of the year which, together with 116 of the previous years, make a total of 284 protests undecided. Of those overruled and denied two were taken to the court of first instance on appeal.

Similar protests were filed with the collectors of customs at other ports of entry, 16 of which were acted upon and sent to this office either on appeal or for review, 13 thereof being against the assessment of customs duties, 1 against the collection of fines, 1 against wharfage tax, and 1 against tonnage dues. Of the decisions of said collectors 3 were affirmed, 1 reversed, and 12 were pending at the close of the year.

The aggregate amount involved on sustained protests filed in Manila was ₱743.90, ₱2,957.72 on overruled and denied protests and ₱2,481.96 on dismissed protests. On sustained protests from subports which were sent to this office for review the total amount involved was ₱554.92. One of these protests sustained from subports was reversed by the insular collector of customs and the amount involved was ₱129.24.

GOVERNMENT PIERS

A total of 913 vessels were berthed at the Philippine Government piers in the port of Manila during the year 1929, 777 of which were vessels engaged in the foreign trade, 110 coastwise vessels, 15 Philippine government vessels, and 11 belonging to the Army and Navy of the United States and foreign countries. These figures compared with 764 berthed at these piers during 1928, of which 668 were vessels in the foreign trade, 69 coastwise, 11 Philippine government vessels, and 16 belonging to the Army and Navy of the United States and other foreign countries, show an increase of 169 vessels.

During the same year 800,980 tons of cargo were discharged by the 777 vessels that took berth at said piers, as compared with 739,000 tons of cargo discharged during 1928. Of the cargo handled about 700,000 tons were discharged onto the piers and the rest onto lighters at shipside.

SECRET SERVICE

During the year under review the work of the secret service force for the detection of smuggling and suppression of unlawful entry of merchandise of prohibited importation has been undertaken as vigorously as in previous years, notwithstanding the numerous difficulties mentioned in previous reports encountered in the enforcement of the tariff, customs, and other laws administered by the bureau of customs. One hundred and eighty-eight cases were filed against violators of the said laws at the port of Manila, of which 183 convictions were obtained, 4 dismissals, and 1 pending at the close of the year. The penalty imposed in all such convictions represents 1 year and 10 months' imprisonment, ₱2,777 fine, and 1 deportation.

PERSONNEL

At the close of the year there were 919 employees, of whom 540, all Filipinos, were in the classified service and 379 in the unclassified service. Of the latter 376 were Filipinos, 2 Americans, and 1 Chinese. Among the unclassified Filipino employees there were 10 Mohammedans serving in ports of Mindanao and Sulu.

PORTS OF ENTRY OTHER THAN MANILA

The customs collections for the ports of Cebu, Iloilo, Zamboanga, Davao, Legaspi, and Jolo are given at the beginning of this report pertaining to the bureau of customs. The foreign commerce of these ports is as follows:

Port of Cebu.—The total foreign trade of Cebu during the year 1929 amounted to ₱73,301,998, of which ₱12,969,418 represents the value of imports and ₱54,332,575 that of exports, as compared with ₱77,900,127 in 1928, of which ₱14,469,938 constitutes the value of imports and ₱63,430,189 that of exports. The balance of trade is, therefore, in favor of this port amounting to ₱35,563,157. The increase in imports was due to greater importations of rice and canned fish, while the decrease in exports was attributed to the low prices for which our export products were sold abroad. Rice, iron and steel, cotton goods, kerosene, wheat flour, and gasoline constitute the principal articles imported into this port valued at ₱6,136,081, ₱2,089,474, ₱1,485,245, ₱1,305,334, ₱1,270,331, and ₱1,231,988, respectively; while copra, abaca, coconut oil, maguey, centrifugal sugar, tobacco leaf, and copra meal and lumber constitute the chief exports valued at ₱20,753,524, ₱14,728,551, ₱9,743,596, ₱2,750,482, ₱2,430,054, ₱1,375,195, ₱1,273,370, and ₱1,142,439, respectively.

Port of Iloilo.—The total foreign trade of the port of Iloilo amounted to ₱87,886,702 during 1929, of which ₱16,123,240 represents the value of imports and ₱71,763,462 that of exports, as compared with ₱82,567,707 in 1928, of which ₱12,198,739 represents the value of imports and ₱70,368,968 that of exports. There is, therefore, a balance of trade of more than ₱55,000,000 in favor of the port. The increase in imports was due to an increment in the importations of rice, railway materials, and fertilizers and that of exports was attributed to larger exportations of sugar. Fertilizers, iron and steel, jute bags, baling and bagging, cotton goods, wheat flour and rice constitute the principal articles imported into this port valued at ₱4,191,135, ₱2,862,120, ₱1,733,070, ₱1,142,754,

₱1,003,999 and ₱1,001,079, respectively; while centrifugal sugar, muscovado sugar, lumber, and copra constitute the chief exports valued at ₱66,568,395, ₱804,942, ₱2,711,136, and ₱1,492,779, respectively.

Port of Zamboanga.—The value of the foreign trade of the port of Zamboanga during the year totaled ₱7,031,649, of which ₱2,188,984 represents the value of imports and ₱4,842,665 that of exports, as compared with ₱6,688,428 in 1928, of which ₱1,609,848 represents the value of imports and ₱5,078,580 that of exports. There is, therefore, a balance of trade favorable to the port amounting to ₱2,653,681. The increase in imports was attributed to a greater importation of rice and the decrease in exports was partly due to decreased production as a result of unfavorable weather conditions and partly to greater amounts of copra shipped to other Philippine ports as coastwise cargo. Cotton goods, rice, kerosene, gasoline, and iron and steel are the principal articles imported into this port valued at ₱568,989, ₱365,685, ₱269,462, ₱200,953, and ₱184,642, respectively; while copra, lumber, abaca, desiccated coconut, dyes and dyestuffs, and raw rubber constitute the chief exports valued at ₱1,926,320, ₱947,599, ₱680,893, ₱565,619, ₱382,377, and ₱242,171, respectively.

Port of Davao.—The total foreign trade of the port of Davao during the year under review reached the sum of ₱17,487,889, of which ₱1,569,434 represents the value of imports and ₱15,918,455 that of exports, as compared with ₱13,762,805 in 1928, of which ₱927,255 constitutes the value of imports and ₱12,835,550 that of exports. There is, therefore, a balance of trade in the amount of ₱14,-349,021 in favor of the port. The increase in imports was ascribed to an increment in the importations of kerosene, cotton goods, gasoline, and fish and fish products, and that of the exports was attributed to increased exportations of abaca. Kerosene, cotton goods, gasoline, fish and fish products, iron and steel and wheat flour are the principal articles imported into this port valued at ₱343,720, ₱184,780, ₱175,500, ₱140,693, ₱130,649, and ₱79,670, respectively; while abaca, copra, and lumber constitute the chief exports valued at ₱14,721,089, ₱894,247 and ₱297,461, respectively.

Port of Legaspi.—The value of the foreign trade of the port of Legaspi during the year amounted to ₱5,779,470, of which ₱1,490,435 represents the value of imports and ₱4,289,035 that of exports, as compared with ₱7,779,823 in 1928, of which ₱705,148 constitutes the value of imports and ₱7,074,675 that of exports. Although the foreign trade of this port suffered a slight reduction during 1929, there is, however, a balance of trade in favor of the port in the amount of ₱2,798,-600. The increase in imports was due to increased importations of gasoline, rice, kerosene, and wheat flour and the decrease in exports was attributed to the eruption of the Mayon Volcano and the severe typhoon of 1928 which damaged the abaca and coconut plantations of the Bicol region. Gasoline, rice, kerosene, and wheat flour constitute the principal articles imported into this port valued at ₱481,642, ₱356,428, ₱278,161, and ₱192,371, respectively; while copra and lumber constitute the chief exports valued at ₱3,652,961 and ₱630,474, respectively.

Port of Jolo.—The value of the foreign trade of this port during the year under review totaled ₱967,906, of which ₱412,631 represents the value of imports and ₱555,275 that of exports, as compared with ₱1,302,334 in 1928, of which ₱396,203 constitutes the value of imports and ₱906,131 that of exports. Notwithstanding that the foreign trade of the port of Jolo suffered a decline during the year just ended, a balance of trade amounting to ₱142,644 was registered in favor of the port. Cotton goods, rice, chemicals, drugs, dyes and medicines, tobacco products, and sugar constitute the principal articles imported into this port valued at ₱178,237, ₱25,556, ₱23,251, ₱19,562 and ₱18,510, respectively; while copra, fish and fish products, and shells constitute the chief exports valued at ₱283,600, ₱130,671, and ₱109,165, respectively.

BUREAU OF INTERNAL REVENUE

COLLECTIONS

The collections made by the Bureau of Internal Revenue during the years 1928 and 1929 were from the following sources:

Item	1928	1929
Excise taxes:		
Domestic—		
Distilled spirits.....	₱4,978,983.17	₱4,847,506.65
Fermented liquors.....	370,040.00	374,368.80
Manufactured tobacco.....	439,479.51	432,172.10
Cigars.....	321,262.96	327,276.44
Cigarettes.....	5,858,833.55	5,793,785.15
Matches.....	94,446.00	151,107.34
Wines and imitations.....	273,132.85	274,889.48
Playing cards.....	1,436.00	6,281.00
Cinematographic films.....	1,262.39	4,192.54
Total.....	12,347,876.43	12,211,579.50
Coal and coke.....	13,200.01	40,977.29
Total excise taxes—Domestic.....	12,361,076.44	12,252,556.79
Imported—		
Distilled spirits.....	367,724.20	420,842.13
Fermented liquors.....	54,298.82	77,196.54
Manufactured tobacco.....	232,460.99	244,980.34
Cigars.....	12.45	1.80
Cigarettes.....	932,666.45	1,253,874.56
Matches.....	546,861.25	396,878.02
Wines and imitations.....	152,641.51	146,195.17
Skimmed milk.....	439.80	730.82
Playing cards.....	421,838.27	385,678.00
Cinematographic films.....	59,825.94	58,720.54
Total.....	2,768,769.68	2,995,097.92
Kerosene or petroleum.....	1,210,584.87	1,233,191.32
Naphtha, gasoline, and all lighter products of distillation.....	3,242,994.21	3,652,875.12
Lubricating oils.....	386,308.86	345,075.75
Total.....	4,839,887.94	5,231,142.19
Medicinal preparations containing prohibited drugs.....	71.03	24.78
Coal and coke.....	250,129.39	284,696.42
Total excises taxes—Imported.....	7,858,858.04	8,510,961.31
Total excise taxes—Domestic and imported.....	20,219,934.48	20,763,518.10
License, business, and occupation taxes:		
Brewers.....	1,900.00	1,800.00
Distillers.....	18,974.28	19,241.68
Rectifiers.....	15,595.00	16,196.00
Retail liquor dealers.....	40,471.62	40,886.17
Retail vino dealers.....	246,702.15	253,046.64
Wholesale liquor dealers.....	119,558.10	116,132.00
Retail dealers in fermented liquors.....	43,596.50	46,261.33
Retail dealers in tuba, basi, tapuy, etc.....	303,684.89	271,666.53
Wholesale dealers in fermented liquors.....	24,010.20	24,348.66
Dealers in manufactured tobacco.....	389,417.71	397,191.33
Manufacturers of chewing and smoking tobacco.....	1,087.50	910.00
Manufacturers of cigars and cigarettes.....	2,354.50	2,353.57
Wholesale peddlers of manufactured tobacco products.....	17,317.00	18,311.00
Wholesale peddlers of alcoholic products.....	9,700.00	10,489.00
Retail peddlers of manufactured tobacco products.....	4,019.50	3,842.00
Retail peddlers of alcoholic products.....	2,060.00	1,630.00
Retail leaf tobacco dealers.....	142,493.50	130,424.25
Repackers of distilled spirits and wines.....	10,205.00	8,215.00
Total.....	1,393,147.45	1,362,945.16
Merchants and manufacturers (1 per cent).....	11,032,824.83	11,431,957.82
Peddlers of merchandise (1 per cent).....	544,493.95	554,225.82
Merchants, manufacturers, and peddlers of merchandise (one-half of 1 per cent, Act No. 3243).....	5,617,135.14	5,824,196.98
Printers and publishers.....	37,534.03	40,393.68
Common carriers.....	239,609.22	271,106.90
Contractors, warehousemen, and others.....	1,007,757.39	1,066,647.35
Total.....	18,479,354.56	19,188,526.55
Commercial brokers.....	223,535.34	253,516.55
Stock brokers.....	20,984.47	21,605.36
Real-estate brokers.....	215,208.94	16,519.11

Item	1928	1929
License, business, and occupation taxes—Continued.		
Customs and immigration brokers	₱2,705.00	₱2,530.00
Pawnbrokers	26,110.00	26,225.00
Theaters, museums, cinematographs, and concert halls	33,882.50	35,931.00
Circuses	1,065.00	925.00
Billiard rooms	24,590.02	24,028.12
Lawyers, medical practitioners, architects, land surveyors, engineers, and public accountants	144,960.75	149,914.65
Chiropodists, manicurists, tattooers, and public accountants	2,115.00	2,175.00
Pharmacists and farriers	28,417.25	29,796.50
Race tracks	8,710.00	8,430.00
Cockpits	719,235.23	723,244.00
Cockfights	129,329.09	132,563.49
Opticians and dental surgeons	24,545.98	27,613.50
Midwives and cirujanos ministrantes in medicine and dentistry	2,855.00	2,470.50
Procuradores judiciales, business agents, insurance agents, and sub-agents	34,522.00	36,651.00
Photographers, engravers, and professional appraisers or connoisseurs of tobacco, etc	23,067.50	24,293.50
Veterinarians	540.00	215.00
Money lenders	35,140.00	28,325.73
Total.	1,501,519.12	1,546,973.01
Banks and bankers		
Insurance companies	1,431,594.74	1,480,804.69
Mines	119,573.03	137,144.92
Registered dealers in prohibited drugs	25,895.50	51,501.93
Sponge fisheries	16,965.46	19,998.87
Firearms license fees	358.52	217.52
Pearl fisheries	142,137.88	151,191.32
Sparring or boxing exhibitions	3,643.50	3,327.50
Weights and measures	8,428.18	10,125.00
Total.	1,936,254.95	2,049,475.82
Total license, business, and occupation taxes.	23,310,276.08	24,147,920.54
Cedulas:		
Class A. Regular at ₱1	28,835.00	29,226.00
Class B. Delinquent, at ₱2	12,856.00	14,768.00
Class D. Special, at ₱1	768.00	746.00
Class E. Fines	501.00	355.00
Class F. Regular, at ₱2	4,490,680.00	4,628,230.00
Class G. Delinquent, at ₱4	718,208.00	683,140.00
Class H. Special, at ₱2	28,018.00	28,638.00
Class I. Road and bridge tax, ₱1	19.00	17.00
Class K. Delinquent road and bridge tax, ₱2	82.00	76.00
Class L. Delinquent from May 1 to June 30, ₱1.50	2,205.50	2,464.50
Class M. Delinquent from May 1 to June 30, ₱3	181,041.00	144,608.00
Class N. Delinquent from May 1 to June 30, ₱1.50		4.50
Total cedulas.	5,463,204.50	5,532,273.00
Franchise taxes		
Income taxes	444,670.22	483,956.29
Documentary stamp tax	4,290,537.57	4,873,039.75
Inheritance tax	805,233.93	929,350.41
Incidental revenue:	292,914.08	667,019.51
United States internal revenue collected in the Philippines	787,049.02	665,514.73
United States internal revenue collected in the United States	7,577.00	6,685.86
Total.	6,627,981.82	7,625,566.55
Revenue from public forests:		
First group timber	409,228.41	381,640.50
Second group timber	121,879.08	122,408.76
Third group timber	812,478.94	942,901.54
Fourth group timber	222,750.94	269,030.48
Firewood (bacauan and tangal)	28,850.38	26,418.44
Firewood (other wood)	18,737.36	18,089.58
Minor forest products	160,568.54	166,482.14
Lease of forest lands	58.94	
Total revenue from public forests.	1,774,552.59	1,926,971.44
Miscellaneous stamp collections		
Service income:		
Justice of the peace fines and fees	413,714.55	425,116.05
Radio registration fees	5,817.13	9,779.94
Tobacco inspection fees	166,445.59	145,761.64
Water rent		198.10
Fees for certificates of taxes paid	1,332.57	1,065.73
Fees for furnishing list	30.61	117.48
Fees for inspecting Chinese books	274.36	9,930.11
Other fees	10.75	47.20
Grand total.	57,984,978.61	60,590,736.68

APPORTIONMENT OF INTERNAL TAXES AND OTHER COLLECTIONS MADE BY THE BUREAU OF INTERNAL REVENUE

In accordance with the provisions of the internal revenue allotment law (ch. 19 of Act No. 2711), the following distribution was made to the insular, provincial, and municipal governments and the Bataan military reservation of the collections effected by the bureau of internal revenue:

Item	Accruing to—		
	Insular	Provincial	Municipal
1928			
Excise taxes:			
Domestic—			
Alcohol and tobacco products.....	₱12,250,732.04		
Matches.....	94,446.00		
Playing cards.....	1,436.00		
Cinematographic films.....	1,262.39		
Coal and coke.....	13,200.01		
Total.....	12,361,076.44		
Imported—			
Alcohol and tobacco products.....	1,739,804.42		
Matches.....	546,861.25		
Skimmed milk.....	439.80		
Playing cards.....	421,838.27		
Cinematographic films.....	59,825.94		
Kerosene or petroleum.....	1,210,584.87		
Naphtha, gasoline, etc.....	1,034.65	₱3,244,027.86	
Lubricating oils.....	196.76	386,505.62	
Coal and coke.....	250,129.39		
Medicinal preparations containing prohibited drugs.....	71.03		
Total.....	4,228,324.56	3,630,533.48	
Total excise taxes.....	16,589,401.00	3,630,533.48	
License, business, and occupation taxes:			
Dealers in alcohol and tobacco products.....	1,089,462.56		₱303,684.89
Merchants, manufacturers, common carriers, etc.....	12,862,219.42		
One-half of 1 per cent tax under Act 3243.....	5,055,421.64	1,273,087.89	1,288,625.61
Occupations, trades, and professions.....	567,307.23		934,211.89
Banks and bankers.....	1,431,594.74		
Insurance companies.....	119,573.03		
Mines.....	25,895.50		
Registered dealers in prohibited drugs.....	16,965.46		
Boxing or sparing exhibitions.....	8,428.18		
Sponge fisheries.....	71.72	143.40	143.40
Pearl fisheries ¹		3,583.50	60.00
Weights and measures ¹		87,192.19	100,465.95
Firearms fees under Act 3097.....	142,137.88		
Total license, business, and occupation taxes.....	21,319,077.36	364,006.98	1,627,191.74
Cedulas ¹.....		3,855,760.00	1,607,444.50
Franchise tax.....	169,337.66	1,17,352.95	1,257,979.61
Income tax.....	4,290,537.57		
Documentary stamp tax.....	805,233.93		
Inheritance tax.....	292,914.08		
Internal-revenue allotment.....	1,3,164,083.55	1,1,538,280.63	1,1,625,802.92
Total revenue from taxation.....	40,302,418.05	9,405,934.04	5,118,418.77
Incidental revenue:			
United States internal revenue collected in the Philippines.....	787,049.02		
United States internal revenue collected in the United States.....	7,577.00		
Revenue from public forests.....	2,1,774,395.89	31.27	125.43
Miscellaneous collections.....	1,403.58		
Service income:			
Justices of the peace fines and fees.....	399,249.14	25.84	14,439.57
Radio registration fees.....	3,5,817.13		
Tobacco inspection fees.....	166,445.59		
Fees for the issuance of certificates of taxes.....	1,332.57		
Fees for furnishing list of taxpayers.....	30.61		
Fees for inspection of Chinese books accounts.....	274.36		
Other fees.....	10.75		
Grand total.....	48,446,003.69	9,405,991.15	5,132,983.77

See footnotes at end of table.

Item	Accruing to—			
	Insular	Provincial	Municipal	Bataan military reservation
1929				
Excise taxes:				
Domestic—				
Alcohol and tobacco products	P12,049,998.62			
Matches	151,107.34			
Playing cards	6,129.00			
Cinematographic films	4,044.74			
Coal and coke	41,277.09			
Total	12,252,556.79			
Imported—				
Alcohol and tobacco products	2,153,090.54			
Matches	396,878.02			
Skimmed milk	730.82			
Playing cards	335,678.00			
Cinematographic films	58,720.54			
Kerosene or petroleum	1,233,191.32			
Naphtha, gasoline, etc.		P3,652,875.12		
Lubricating oils	6.81	345,082.56		
Coal and coke	284,696.42			
Medicinal preparations containing prohibited drugs	24.76			
Total	4,513,003.63	3,997,957.68		
Total excise taxes	16,765,560.42	3,997,957.68		
License, business, and occupation taxes:				
Dealers in alcohol and tobacco products	1,091,278.63		P271,666.53	
Merchants, manufacturers, and common carriers	13,359,733.85			P4,595.72
One-half of 1 per cent tax under Act 3243	5,241,777.29	283,154.67	299,265.02	
Occupations, trades, and professions	604,056.40		942,916.61	
Banks and bankers	1,480,804.69			
Insurance companies	137,144.92			
Mines	51,501.93			
Registered dealers in prohibited drugs	19,998.87			
Boxing or sparring exhibitions	10,125.00			
Sponge fisheries	43.50	87.01	87.01	
Pearl fisheries ¹		3,297.50	30.00	
Weights and measures ¹		89,160.59	106,003.48	
Firearms fees under Act 3097	151,191.32			
Total license, business, and occupation taxes	22,147,656.40	375,699.77	1,619,968.65	4,595.72
Cedulas ¹		3,895,038.75	1,637,234.25	
Franchise tax	181,711.36	19,011.82	283,233.11	
Income tax	4,872,887.25			152.50
Documentary stamp tax	929,264.35			86.06
Inheritance tax	667,019.51			
Internal revenue allotment	3,164,083.55	1,538,280.64	1,625,802.91	
Total revenue from taxation	42,400,015.74	9,825,988.66	5,166,238.92	4,834.28
Incidental revenue:				
United States internal revenue collected in the Philippine Islands	665,514.73			
United States internal revenue collected in the United States	6,685.86			
Revenue from public forests	1,925,920.71			1,050.73
Miscellaneous stamp collections	1,930.80			
Service income:				
Justice of the peace fines and fees	404,188.55	109.10	20,551.80	266.60
Radio registration fees	4,9,779.94			
Tobacco inspection fees	145,761.64			
Rental of water power	196.10			
Fees for the issuance of certificates of taxes	1,605.73			
Fees for furnishing list of taxpayers	117.48			
Fees for inspection of Chinese books accounts	9,930.11			
Other fees	47.20			
Grand total	45,571,696.59	9,826,097.76	5,186,790.72	6,151.61

¹ The provincial shares of the cities of Manila and Baguio and road and bridge shares in cedula collections of Corregidor, Olongapo and the other municipalities mentioned in Act 3382 are considered as municipal funds.

² Of these amounts the sums of P38,381.15 and P70.32 as taxes and penalties respectively accrued to the Bataan military reservation fund.

³ Only 20 per cent of these collections, or P1,099.48 and P63.95 for fees and penalties, respectively, accrues to the insular government, the remaining 80 per cent or P4,397.92 and P255.78 for fees and penalties, respectively, being transferred to the radio broadcasting fund.

⁴ Only 20 per cent of these collections, or P1,774.72 and P181.27 for fees and penalties, respectively, accrues to the insular government, the remaining 80 per cent or P7,098.88 and P725.07 for fees and penalties, respectively, being transferred to the radio broadcasting fund.

Although the predictions of prominent business men at the beginning of the year just ended were rather gloomy, yet the year 1929 closed at the most prosperous period ever recorded so far not only from the point of view of private interests but also from that of governmental income. In comparison with the revenue of the previous year, an increase of ₱2,605,758.07 was registered at the close of the year under review, the collection for 1928 having been ₱57,984,978.61¹ and that for 1929 having been ₱60,590,736.68, or an increase of 4.49 per cent. Of this increase, ₱2,131,844.51 corresponded to the insular government, the insular share for 1929 being ₱45,577,848.20, as compared with ₱43,446,003.69, the insular share for 1928; ₱420,106.61 corresponded to the provincial governments, their share for 1929 being ₱9,826,097.76, while that for 1928 was ₱9,405,991.15; and ₱53,806.95 corresponded to the municipal governments, their share for 1929 being ₱5,186,790.72 and that for 1928 being ₱5,132,983.77. As compared with the collection of ₱52,279,177.22 corresponding to the year 1920, which represented the culmination of the era of prosperity brought about by the World War, the year 1929 showed an increase of ₱8,311,559.46, or 15.85 per cent.

COST OF COLLECTION

During the last decade, the cost of collecting each peso of revenue was as follows: 1.27 centavos in 1920; 1.80 centavos in 1921; 1.62 centavos in 1922; 1.49 centavos in 1923; 1.40 centavos in 1924; 1.50 centavos in 1925; 1.57 centavos in 1926; 1.53 centavos in 1927; 1.62 centavos in 1928; and 1.51 centavos in 1929.

For the year under consideration, the operation of the bureau of internal revenue cost the insular government ₱915,737.26 as compared with ₱937,865.14 during 1928, or a decrease of ₱22,127.88. While on the whole a decrease in the net cost of operation was registered, yet there were certain items such as traveling expenses of personnel, illumination and power service, miscellaneous service, rental of buildings and grounds, and sundry expenses in connection with the secret service, which showed increases. The appointment of additional personnel in the field service and the necessity of mobilizing the field force for more effective enforcement of the tax laws are responsible for the increase registered in traveling expenses. The defective electric wiring in the bureau of internal revenue building is responsible for the increased expenses in illumination and power service. The need of furnishing certain supervising agents and agent's assistants in charge of subdistrict offices led to an increase in the item of rental of buildings and grounds. The amounts spent for detection of frauds and securing of evidence account for the larger disbursements for secret-service work.

ALCOHOLIC PRODUCTS

Distilled spirits.—Comparing the fiscal years 1928 and 1929, it is noted that during the former year 28,695,838 proof liters of distilled spirits were removed from distilleries, whereas 33,830,945 proof liters were removed during the year under review, or an increase of 5,135,107 proof liters. These figures include not only spirits subject to tax but also those exempt from tax, as well as by-products such as fusel oil.

Taxes in the amount of ₱420,842.13 were collected on 530,213 proof liters of imported distilled spirits in 1929, as against ₱367,724.20 collected on 464,441 proof liters in 1928.

The quantity of fusel oil removed for export to the United States during the year 1929 was 2,630.19 gauge liters, which quantity was produced from 4,918 proof liters of distilled spirits.

At the end of the year under discussion there were in operation throughout the islands 91 registered stills, as compared with 87 in operation on December 31, 1928; 86 on December 31, 1927; 83 on December 31, 1926; 80 on December 31, 1925; 80 on December 31, 1924; and 79 on December 31, 1923.

Wines.—The local consumption of still wines and imitation wines was 1,863,412 gauge liters in 1929 and 1,876,376 gauge liters in 1928, or a per capita consumption of 0.15 gauge liter.

Fermented liquors.—During 1929 the quantity of domestic and imported beer removed for domestic consumption reached 4,512,365.40 gauge liters, as compared with 4,332,988.20 gauge liters removed during the previous year, or a per capita consumption of 0.35 and 0.34 gauge liter, respectively. In addition to this quan-

¹ These figures are ₱1,648.29 greater than those shown in the 1928 report, due to certain fees collected, which were taken up only in the accounts of this bureau, but not in the internal-revenue collections.

tity, local brewers produced for export and consumption on the high seas, 80,481.60 gauge liters in 1929 and 168,642 gauge liters in 1928.

TOBACCO PRODUCTS

Smoking and chewing tobacco.—The quantities of domestic and imported smoking and chewing tobacco on which taxes were collected during the years 1928 and 1929 were as follows:

Kind	1928			1929		
	Domestic	Imported	Total	Domestic	Imported	Total
Smoking tobacco.....	<i>Kilos</i> 523,194 264,272	<i>Kilos</i> 40,212 434,029	<i>Kilos</i> 563,406 698,301	<i>Kilos</i> 511,010 271,650	<i>Kilos</i> 37,733 463,209	<i>Kilos</i> 548,743 734,859
Total.....	787,466	474,241	1,261,707	782,660	500,942	1,283,602
Increase or decrease (—)				—4,806	26,701	21,895
Per cent.....				—0.61	5.63	1.74

Besides the quantity of smoking and chewing tobacco removed for domestic consumption, local manufacturers exported 23,546 kilos of smoking tobacco in 1928, and 28,673 kilos in 1929, or an increase of 21.76 per cent.

Stripped and partially manufactured tobacco.—During the year under discussion there were exported 2,292,162 kilos of stripped and partially manufactured tobacco, as compared with 2,586,823 exported during the previous year, or a decrease of 294,661 kilos, or 11.31 per cent.

Leaf tobacco.—There was an increase of 7,206,293 kilos in the exportation of leaf tobacco during 1929, the quantity exported being 26,017,290 kilos, as against 18,811,627 kilos exported during the previous year.

Cigars.—During 1929 the total production of cigars was 298,317,085, whereas during the previous year the production was 331,837,793, or a decrease of 10.10 per cent. Of the number of cigars produced in 1929, 110,740,724, or 37.12 per cent, were consumed in the Philippine Islands; 31,163,703 cigars, or 10.45 per cent, were exported to foreign countries; and 156,412,658 cigars, or 52.43 per cent, were shipped to the United States. During the previous year, 106,870,598 cigars, or 32.20 per cent, were consumed in the Philippine Islands; 35,539,874, or 10.71 per cent, were exported to foreign countries; and 189,427,321, or 57.09 per cent, were shipped to the United States.

Cigarettes.—The total production of cigarettes in 1929 was 4,974,599,866, and during the previous year it was 5,110,187,247 cigarettes, or a decrease of 135,567,381 cigarettes, representing 2.65 per cent. This decrease in domestic cigarettes was offset by an increase in imported cigarettes, the number imported in 1929 being 895,311,228 in comparison with 649,734,390 imported in 1928, and the collections increased from ₱932,666.45 to ₱1,263,874.56 or ₱331,208.11, or 35.51 per cent. Of the number produced during 1929, 4,811,120,495 cigarettes, or 96.71 per cent, were consumed in the Philippine Islands; 159,180,861 cigarettes, or 3.20 per cent, were exported to foreign countries; and 4,298,510 cigarettes, or 0.09 per cent, were shipped to the United States. In 1928, 4,480,512,372 cigarettes, or 95.5 per cent were consumed in the Philippine Islands; 227,266,075 cigarettes, or 4.45 percent, were exported to foreign countries; and 2,408,800 cigarettes, or 0.05 per cent, were shipped to the United States.

MATCHES

The past year showed an increase in the number of gross boxes of matches removed for domestic consumption, from 235,975 gross boxes of domestic manufacture removed in 1928, a figure which represented 14.72 per cent of the total removed for domestic consumption, to 369,098.67 gross boxes, or 32.26 per cent of the total removed for domestic consumption. In the case of the imported matches, 1,367,193.16 gross boxes were removed for domestic consumption in 1928, or 85.28 per cent of the total removed for domestic consumption, whereas the removal in 1929 was 992,195.11 gross boxes or 67.74 per cent of the total removed for domestic consumption.

LICENSE, BUSINESS, AND OCCUPATION TAXES

Dealers in alcohol and tobacco products.—There were collected as privilege taxes on dealers in alcohol and tobacco products during the fiscal year 1929 ₱1,362,945.16, in comparison with ₱1,393,147.45 collected during the previous year, a decrease of ₱30,202.29 or 2.17 per cent. Of the total collection for the year under review, 31.58 per cent was paid by dealers in distilled spirits and wines; 40.34 per cent, by dealers in tobacco products; 25.11 per cent, by dealers in fermented liquors, tuba, basi, tapuy, etc.; and 2.97 per cent by manufacturers and peddlers of liquors and tobacco products. For the year 1928, the distribution was as follows: 30.77 per cent was paid by dealers in distilled spirits and wines; 39.71 per cent, by dealers in tobacco products; 26.65 per cent, by dealers in fermented liquors, tuba, basi, tapuy, etc.; and 2.87 per cent, by manufacturers and peddlers of liquors and tobacco products.

Merchants, manufacturers, common carriers, etc.—There were collected as percentage taxes on merchants, manufacturers, common carriers, and other persons subject to the percentage tax of 1 per cent during the fiscal year 1929, together with the one-half of 1 per cent provided by Acts Nos. 3065 and 3243, the former as amended by Act No. 3183, the sum of ₱19,188,526.55 as against ₱18,479,354.56 collected during the fiscal year 1928, showing an increase of ₱709,171.99 or 3.84 per cent. These taxes were collected as follows:

On—	1928		1929	
	Collection	Per cent	Collection	Per cent
Merchants, manufacturers and peddlers, 1 per cent	₱11,577,318.78	62.65	₱11,986,183.64	62.47
One-half of 1 per cent	5,617,135.14	30.40	5,824,196.98	30.35
Printers, publishers, contractors, warehousemen, hotel and restaurant keepers, etc.	1,045,291.42	5.65	1,107,039.03	5.77
Common carriers	239,609.22	1.30	271,106.90	1.41
Total	18,479,354.56	100.00	19,188,526.55	100.00

The increase of ₱709,171.99 in comparison with the previous year's collection represented a healthy reaction against the apparent downward tendency noticeable in this item during the years 1927 and 1928. This increase might have been greater had good prices prevailed for the staple products of the country, the comparatively low prices being further aggravated by a depression which began to be felt about August of last year. It was only the volume of commodities sold rather than the good prices which was responsible for the increased collections.

Occupations, trades, and professions.—On occupations, trades, and professions, privilege taxes in the amount of ₱1,546,973.01 were collected during 1929, in comparison with the collection of ₱1,501,519.12 for 1928, or an increase of ₱45,453.89, representing 3.03 per cent. Of the collection for 1929, 55.32 per cent was paid by proprietors of cockpits; 18.85 per cent by commercial, stock, and real estate brokers; and 25.83 per cent by lawyers, doctors, civil engineers, surveyors, etc. Of the collection for 1928, 56.51 per cent was paid by proprietors of cockpits; 17.30 per cent, by commercial, stock, and real-estate brokers; and 26.19 per cent, by lawyers, doctors, civil engineers, surveyors, etc.

Pursuant to the provisions of the internal revenue law, the privilege tax collections from owners of cockpits and the taxes on cockfights accrue entirely to the treasuries of the various municipalities in which such taxes are collected. Nine hundred and ten municipalities and townships availed themselves of the provisions of the law authorizing the imposition by municipal councils of additional taxes on cockpits. The rates of additional privilege taxes thus imposed ranged from ₱4 to ₱16,000 per annum. There were 164 municipalities, townships, and municipal districts in which no cockpit tax receipts were issued during the year 1929.

CEDULAS

The cedula tax collected during the year reached ₱5,532,273 in comparison with ₱5,463,204.50 collected during the preceding year, an increase of ₱69,068.50, representing 1.27 per cent. The number of cedulas sold during the year under consideration was 2,586,475 in comparison with 2,536,808 cedulas sold in 1928, an increase of 49,667 cedulas.

BANKS AND BANKERS

The following comparative statement, based upon taxes assessed and collected, shows the average amount of capital employed by, average amount of deposits with, and average amount of circulation of banks during the period from July 1, 1927, to June 30, 1928, and from July 1, 1928, to June 30, 1929:

	July 1, 1927, to June 30, 1928	July 1, 1928, to June 30, 1929
Average capital.....	₱46,485,463.37	₱53,846,843.57
Average deposits.....	151,392,692.32	160,624,603.91
Average circulation.....	27,814,537.49	22,660,954.08

INSURANCE COMPANIES

The following table, based on the statements rendered, shows the total amount of each kind of insurance on which premiums were paid and the average rate of premiums paid during the calendar years 1927 and 1928:

	1927		1928	
	Total amount of insurance	Average rate of premium	Total amount of insurance	Average rate of premium
Fire.....	₱417,759,935.85	1.04	₱436,709,659.64	1.05
Marine.....	464,032,541.68	.43	465,477,685.36	.42
Life.....	65,454,422.67		71,458,684.92	
Accident.....	2,462,995.00	2.40	16,484,393.33	1.45
Fidelity and surety.....	25,479,883.11	1.44	29,464,531.07	1.44
Typhoon and earthquake.....	31,640,642.80	.30	29,335,999.20	.34
Motor cars.....	2,972,023.13	3.38	3,722,309.52	2.94
Personal baggage.....	361,185.00	.94	307,630.00	.96
War (marine).....	14,841,231.00	.22	20,013,565.00	.42

INCOME TAX

For the second time since the year 1921, the income-tax collection has reached and exceeded the ₲4,000,000 mark. During the year under review, the income taxes and penalties collected reached ₲4,873,039.75, which, compared with the collection during 1928 amounting to ₲4,290,537.57, shows an increase of ₲582,502.18. The year 1929 has registered the second largest income-tax collection since the income tax law was enforced in the Philippine Islands, the largest collection amounting to ₲4,880,370.25 having been made in 1921. The large collection was brought about by the good prices paid for sugar and other staples in 1928 and the good business which generally prevailed during the year.

During the year 1929, there was filed 21,144 (7,098 taxable and 14,046 exempt) individual returns, and 4,528 (2,764 taxable and 1,764 exempt) corporation returns, or a total of 25,672 individual and corporation returns. During the preceding year 1928, there were filed 20,449 (7,058 taxable and 13,391 exempt) individual returns, and 4,689 (2,902 taxable and 1,787 exempt) corporation returns or a total of 25,138 individual and corporation returns. The total number of returns filed during 1929 exceeded by 534 the number of returns filed during 1928. It will also be noted that the number of taxable individual returns filed during 1929 exceeded by 40 the number of taxable individual returns filed in 1928, although the number of corporation returns filed during 1929 was less by 138 than the taxable corporation returns filed during the year 1928. The decrease in the number of taxable corporation returns filed in 1929 may be accounted for by the larger number of delinquent corporation returns filed in 1928 in comparison with that filed during 1929, the number for 1928 being 607 and that for the year under consideration, 384.

The increase in our collection for the year under review may also be attributed to the fact that there was reported a net increase of ₲8,287,640.40 in the amount of the net income reflected by taxable individual returns corresponding to the year 1928 over the net income reported in the returns for 1927, the income for the latter year being ₲96,918,370.51. In spite of the decrease in the number of

taxable corporation returns filed for the year 1928 compared with that for the preceding year, the amount of net income reported in the taxable corporation returns for 1928 shows an increase of ₱7,678,416.32 over the net income reported for 1927, which was ₱64,673,013.14.

INHERITANCE TAX

The year 1929 witnessed and registered the largest collection of inheritance tax in the Philippines since Act No. 2601, the first inheritance tax law, was enacted on July 1, 1916. The total collection during the year from this source aggregated ₱667,019.47, which compared with that of the previous years amounting to ₱292,914.08, shows an unparalleled increase of ₱374,105.39, or 127.71 per cent. The increase in collection was partly due to the creation in the 1929 budget of two new positions for inheritance-tax examiners and to the fact that during the year there were transmitted one estate valued at over ₱400,000, one at over ₱500,000, one at over ₱800,000, and one at over ₱2,000,000.

During the year 1929 there were filed 2,042 inheritance-tax returns involving a total net inventoried value of property passing through inheritance amounting to ₱22,601,784.16, as against only 1,499 inheritance-tax returns filed for last year covering a total net inventoried value of the estates in the amount of ₱19,938,- 214.13.

FRANCHISE TAX

Of the total collection of ₱483,956.29 as franchise taxes in 1929, ₱181,711.36 accrued to the insular government, ₱227,864.83 to the city of Manila, ₱19,011.82 to Provinces, and ₱55,368.28 to other municipalities.

PEARL FISHING

Under the provisions of Act No. 2604 there was collected during 1929 the amount of ₱3,327.50 as compared with ₱3,643.50 collected in 1928, or a decrease of ₱316. This collection accrued intact to the treasuries of the respective Provinces where collected.

SPONGE FISHING

Pursuant to Act No. 2584 the fees and penalties for sponge fishing during 1929 amounted to ₱217.52, of which 20 per cent or ₱43.50 accrued to the insular treasury, 40 per cent or ₱87.01 to the provincial treasuries, and 40 per cent or ₱87.01 to the municipal treasuries concerned.

FIREARMS FEES

The total amount of firearms fees collected in 1929, pursuant to Act No. 3097, amounted to ₱151,191.32 as compared with ₱142,137.88 collected in 1928. The 1929 collection consisted of ₱142,485.53 as taxes and ₱8,705.79 as penalties.

SPARRING OR BOXING EXHIBITIONS

Under the provisions of Act No. 2984 the taxes and penalties collected on sparring or boxing exhibitions during 1929 amounted to ₱10,125, as compared with ₱8,428.18 collected during 1928, or an increase of ₱1,696.82.

RADIO REGISTRATION FEES

Pursuant to the provisions of Act No. 3338, approved December 7, 1926, and effective on that same date, an annual registration fee of ₱2 for crystal receivers and ₱10 for sets using a vacuum tube or tubes is payable on each radio receiving set. This registration fee is payable quarterly in advance during the first 20 days of each quarter, a surcharge of 20 per cent being added whenever the fee is not paid within the time prescribed by law. According to the terms of the law, 20 per cent of the collection accrues to the general fund and the remaining 80 per cent is set aside as a special fund to be known as the "radio broadcasting fund." The total collection made amounted to ₱9,779.94, of which ₱8,873.60 represented fees and ₱906.34 penalties. Because of the provisions of the law, only ₱1,955.99 accrued to the general fund and ₱7,823.95 to the radio broadcasting fund. The number of radio sets registered during the year was 705, of which 680 were tube receivers and 25 crystal receivers.

THE TOBACCO PROMOTION WORK OF THE BUREAU

The Philippine cigar trade in the United States.—During the year under review there were exported to the United States 156,641,727 cigars as compared with 187,360,260 sent to that country during the previous year, or a decrease of 30,718,533 or 16.38 per cent. The formidable competition of the American machine-made cigars, which are attractively and heavily advertised, was the main cause of the decrease just mentioned. The uncertain marketing conditions during the year, as a result of the mergers of large American cigar manufacturers, contributed also to the decline of the Philippine cigar trade. Uncertainty also with respect to the congressional action which might be taken in limiting the number of Philippine cigars entering the American market free of customs duties served to limit the orders of some importers who were very willing to handle Philippine cigars.

In addition to the influences just mentioned, there were various other causes of the apparently gloomy prospects of our cigars in the United States. By convenience, such causes may be mentioned as follows: (a) The variability of prices of some Manila brands; (b) the disturbance of market conditions brought about by the sale of low-grade Manillas at very cheap prices; (c) inability of dealers to obtain some brands from the stock of importers; (d) difficulty and delay in obtaining fresh cigars, when the importing is done by the jobbers; (e) the occasional overstocking of some dealers; (f) the fact that some Manila factories give scant or no cooperation in the distribution of their brands; (g) the deterioration of quality which occurs when jobbers or retailers allow their cigars to become too dry; (h) failure of some Manila manufacturers to keep in close contact with American market conditions; and (i) the mistaken policy of putting the lower priced cigars to the fore.

Because of the noted decrease in the sales of Philippine cigars, Messrs. Charles A. Bond and David F. Morris, Philippine tobacco agents in the United States, had to travel more extensively throughout the country during 1929 than during the previous year. In the course of their travels they found many dealers were interested in the legitimate 5-cent Manila cigars and in the higher classes of cigars, especially those of class C. As it is known, class C cigars are those retailed at more than 8 cents each and not more than 15 cents each. The tobacco agents believe that the market for Philippine class C cigars can be enlarged, on account of the fact that of the domestic cigars sold in the United States, approximately one-third belong to class C. The extent of the travels of Messrs. Bond and Morris is indicated in the following comparative statement:

	1928	1929	Increase
Number of States covered	22	27	5
Number of cities or districts visited	123	140	17
Number of dealers interviewed	517	594	77

In 1928 several manufacturers attempted to send cigars to the United States with a classification higher than what they deserve, and invariably such cigars were refused inspection by the bureau of internal revenue. During 1929 there have been several attempts again, and an importer in the United States filed a protest with the Commissioner of Internal Revenue at Washington against the action of the collector of internal revenue in Manila to permit the shipments to that country of class A cigars bearing class B or C stamps. The objective of the bureau of internal revenue in taking the action complained of was to prevent the misrepresentation of Philippine cigars in the United States and to protect the consumers in that country from such misrepresentation. After having been informed of this reason the Commissioner of Internal Revenue upheld the action of the bureau of internal revenue and dismissed the protest. Not only are cases of this nature guarded against, but the bureau is continuing the strict inspection of tobacco products intended for the American market to prevent the shipment of defective goods.

At the same time that the finished products are closely inspected, the leaf tobacco, upon arriving in Manila from the Provinces of origin, is inspected to determine whether or not the regulations have been complied with.

The Philippine tobacco trade in China.—On account of the high tariff imposed by the Chinese Government on tobacco products, effective February 1, 1929, the

large decrease in the quantity of tobacco products sent to the Chinese market during the year under review was registered, in comparison with the exports of 1928. The exports to that market during the years 1928 and 1929 were as follows:

	1928	1929
Cigars.....	19,285,617	13,988,051
Cigarettes.....	206,083,616	139,342,185
	<i>Kilos</i>	<i>Kilos</i>
Stripped and partially manufactured tobacco.....	215,185	154,801
Smoking and chewing tobacco.....	7,095	5,563

The publicity campaign under Act No. 3424.—Act No. 3424 set aside ₱300,000 for propaganda work to be undertaken in foreign countries in behalf of Philippine tobacco products. The trade advantages of the American market have induced the undertaking of the propaganda work in the United States only up to this time, although the said law has been effective for two years. During 1929, the total amounts spent from the standing appropriation of ₱300,000 was ₱47,074.71. These amounts added to previous expenditures reaching ₱33,085.33 leave a balance of the fund on December 31, 1929, of ₱219,839.96. The propaganda work undertaken in the United States includes not only newspaper, magazine, and trade journal advertising but also billboard advertising.

The tobacco board.—The membership of the tobacco board during 1929 was as follows: Mr. Juan Posadas, collector of internal revenue, as ex-officio chairman; Dr. S. Youngbarg, director of agriculture, Mr. Fidel A. Reyes, director of the bureau of commerce and industry, Messrs. F. A. Meyer and Felix Valencia, representing the Manila Tobacco Association, and Mr. Vicente T. Fernandez and Dr. L. O. Manzanillo, representing the tobacco producers and growers, as members. Mr. Fidel A. Reyes ceased to be a member of the board when he resigned as director of the bureau of commerce and industry, effective July 16, 1929. He was temporarily relieved by Mr. F. Segado who was designated acting director of the bureau of commerce and industry until November 4, 1929, when Mr. M. J. de la Rama was appointed assistant director and designated acting director of that bureau.

The tobacco inspection fund.—From January 1 to December 31, 1929, there accrued as income to the tobacco inspection fund the sum of ₱145,761.64. At the beginning of the year, there was a balance on hand of ₱52,016.80 and at the end of the year the unexpended allotment of ₱31,326.06 reverted to the fund, so that there was a total sum available for expenditure during the year of ₱229,104.50. The expenditures reached ₱159,880.10, so that there was a balance on hand at the end of the year of ₱69,224.40.

BUREAU OF BANKING

The bureau of banking was created by virtue of Act No. 3519 passed during the special session of the Philippine Legislature in February, 1929, and approved by the governor general on February 20, 1929. Prior to the passage of this law, the supervision of banking institutions was vested in the insular treasurer. It was his duty, personally, or by deputy, at least once a year, and at such other times as he might deem expedient, to make an examination of the books of every institution in order to ascertain its cash and available assets in the Philippine Islands, and its general condition and method of doing business. The new law devolved this duty upon the bank commissioner and also clothed him with other powers which the insular treasurer did not possess. The first bank commissioner appointed by the governor general was Mr. Earl B. Schwulst. When he resigned in December, 1929, his position was immediately filled by the present incumbent.

In March, 1929, the bureau of banking started to function in its new quarters at the Perez Samanillo Building located on the Escolta, the main business thoroughfare in Manila.

All banking institutions under the supervision of the bureau of banking were examined once during the year under review as required by law. The new policy of examining every such institution twice a year could not be carried out, except in three cases, due to the limited number of examiners.

Statement of expenditures and income of the bureau of banking for the period from March 1 to December 31, 1929

Expenditures:	
Salaries, wages, travel expense.....	P33,870.77
Rental of office.....	3,527.75
Office equipment.....	4,399.48
Postal, telegraph, telephone, and cable service.....	486.37
Supplies and materials.....	1,499.57
Miscellaneous.....	1,562.28
 Total expenditures.....	 45,346.25
Income:	
Service income—Amount assessable against banking institutions subject to inspection by the bureau of banking, representing one-half of the total expenses detailed above.....	22,673.13
 Net cost to the bureau.....	 22,673.12

The authority for the assessment of one-half of the expenses of the bureau against the banking institutions subject to its supervision is found in section 1637 of the Administrative Code (as amended by Act No. 3519) which reads, in part, as follows:

"The total annual expenses of the bureau of banking shall be reimbursed annually to the Government to the extent of one-half by assessment levied upon all banking institutions subject to inspection by the bank commissioner. The proportion of expenses of the bureau of banking to be assessed against each such banking institution shall be the same as the proportion which its average total assets bear to the average total assets of all such banking institutions during the year in which the expenses were incurred, but the one-half of the total expenses of the bureau of banking assessed against all banking institutions in any one year shall not exceed P60,000. The bank commissioner shall by regulation prescribe the form, manner, and time for the levying and payment of the assessment."

The total expenses of the bureau would have been greater than the total stated above had the salary of the first bank commissioner been charged against the appropriation for the bureau instead of being paid out of the fund created under the provisions of Act No. 3431, commonly known as the Belo Act, at the disposal of the governor general. At present the salary of the commissioner is borne partly by the Belo fund and partly by the appropriation for the bureau of banking.

BANKS AND BANKING

The following banks and trust companies were engaged in business during the year:

DOMESTIC

1. Philippine National Bank, Manila, with branches at Bacolod, Occidental Negros; Iloilo, Iloilo; Cabanatuan, Nueva Ecija; Lucena, Tayabas; Legaspi, Albay; Cebu, Cebu; Davao, Davao; Dagupan, Pangasinan; and an agency in New York, N. Y.
2. Bank of the Philippine Islands, Manila, with branches at Iloilo, Iloilo; Cebu, Cebu; Zamboanga, Zamboanga.
3. China Banking Corporation, Manila, with branches at Amoy, China, and Shanghai, China.
4. Monte de Piedad and Savings Bank, Manila.
5. Philippine Trust Co., Manila.
6. Mercantile Bank of China, Manila.
7. Peoples Bank & Trust Co., Manila, with branches at San Pablo, Laguna, and Baguio, Mountain Province.
8. Postal Savings Bank, Manila.

FOREIGN

1. Hongkong and Shanghai Banking Corporation, branch at Manila, with a subagency at Iloilo, Iloilo.
2. International Banking Corporation, branch at Manila, with a subagency at Cebu, Cebu.
3. Chartered Bank of India, Australia, and China, branch at Manila, with subagencies at Cebu, Cebu; Iloilo, Iloilo; Zamboanga, Zamboanga.
4. The Yokohama Specie Bank (Ltd.), branch at Manila.

Two of the domestic banks were originally established by royal decrees granted by Spanish sovereigns. These are the Bank of the Philippine Islands, which is now governed by the special charter granted to it by the old Philippine Commission and which was recently amended by the Philippine Legislature, and the Monte de Piedad and Savings Bank, which is still operating under the original

royal decree. The Philippine National Bank also operates under a special act passed by the Philippine Legislature.

All the other banks are governed by the provisions of the corporation law pertaining to such institutions. Up to the present time no bank has been established under the Guanaco law (Act No. 3154).

With the exception of the Baguio branch of the Peoples Bank & Trust Co., which opened its doors to the public on May 1, 1929, there has been no other addition to the list of banks and trust companies in operation during the year.

Banking business during the year under review showed only a slight improvement over that of 1928. The total resources of banks and trust companies on December 31, 1929, amounted to ₱272,638,277.97. Compared with the amount of ₱272,392,088.37 reported on December 31, 1928, this is an increase of only ₱246,189.60.

The decrease of ₱5,027,200 in circulating notes is accounted for by the retirement of the notes of the Philippine National Bank and the Bank of the Philippine Islands, as required by their respective charters.

The following comparative consolidated statement of assets and liabilities of mutual building and loan associations, as of December 31, 1929, and December 31, 1919, shows the progress made in the business of these associations during the last 10 years:

	Dec. 31, 1929	Dec. 31, 1919	Increase (+) or decrease (-)
ASSETS			
Real estate loans.....	₱18,885,263.39	₱6,987,697.03	+₱11,897,566.36
Stock loans.....	863,443.12	111,185.45	+752,257.67
Cash.....	241,091.45	607,598.31	-366,506.86
Office building.....	636,600.00	407,000.00	+229,600.00
Other real estate acquired.....	434,293.00		+434,293.00
Other assets.....	730,716.65	366,247.87	+364,468.78
Total.	21,791,407.61	8,479,728.66	+13,311,678.95
LIABILITIES			
Capital paid in.....	17,438,739.80	6,927,979.35	+10,510,760.45
Surplus.....	477,433.40	589,943.84	-112,510.44
Legal reserve.....	72,653.11		+72,653.11
Borrowed money.....	2,196,161.93	545,802.66	+1,650,359.27
Other liabilities.....	1,606,419.37	416,002.81	+1,190,416.56
Total.	21,791,407.61	8,479,728.66	13,311,678.95

During the period, the total resources of mutual building and loan associations have almost trebled, increasing from ₱8,479,728.66 to almost ₱22,000,000. The immense resources of those associations reflect the great influence which they are exerting in developing the habit of home building and investing on the part of the people.

Consolidated statement of resources and liabilities of all banks and trust companies in the Philippine Islands at the close of each fiscal year indicated

	Dec. 31, 1929	Dec. 31, 1928	Increase (+) or decrease (-)
RESOURCES			
Loans and discounts.....	₱80,391,412.86	₱109,308,936.69	-₱28,917,525.83
Overdrafts.....	65,912,938.46	60,200,522.70	+5,712,415.76
Stocks, securities, etc.....	11,524,593.80	12,247,640.47	-723,046.67
Banking house, furniture, and fixtures.....	2,352,453.48	2,387,478.15	-35,024.67
Other real estate and mortgages owned.....	3,629,034.51	3,054,533.65	+574,500.86
Due from head office, branches, agents, and correspondents.....	47,146,266.98	34,536,816.08	+12,609,448.90
Due from other banks.....	5,398,558.20	8,198,375.22	-2,799,817.02
Bills of exchange.....	26,219,054.75	18,347,693.92	+7,871,360.83
Cash on hand.....	18,972,574.78	15,224,112.88	+3,748,461.90
Checks and other cash items.....	1,665,435.34	1,413,381.70	+252,053.64
Profit and loss accounts.....	1,978,536.85	1,003,316.41	+975,220.44
Resources other than those above.....	7,447,417.96	6,469,278.50	+978,139.46
Total.	272,638,277.97	272,392,088.37	+246,189.60

Consolidated statement of resources and liabilities of all banks and trust companies in the Philippine Islands at the close of each fiscal year indicated—Continued

	Dec. 31, 1929	Dec. 31, 1928	Increase (+) or decrease (-)
LIABILITIES			
Capital stock.....	₱25,484,550.00	₱25,478,150.00	+₱6,400.00
Reserve fund.....	7,575,188.46	6,142,131.99	+1,433,057.47
Undivided profits.....	7,263,722.72	6,737,508.88	+526,213.84
Bank notes in circulation.....	18,989,753.90	24,017,003.50	-5,027,249.60
Due to head office, branches, agents, and correspondents.....	49,945,794.32	27,386,495.13	+22,559,299.19
Due to other banks.....	3,921,985.64	5,417,918.63	-1,495,932.99
Dividends due and unpaid.....	338,343.50	337,744.00	+599.50
Demand deposits.....	60,492,788.92	69,078,633.32	-8,585,844.40
Time deposits.....	30,723,692.53	33,035,044.83	-2,311,352.30
Savings deposits.....	54,986,822.20	62,554,310.25	-7,567,488.05
Bills payable:			
Domestic.....	20,340.84	7,008.58	+13,332.26
Foreign.....	459,940.84	392,993.95	+66,946.89
Cashier's checks outstanding.....	638,491.15	119,892.59	+518,598.56
Certified checks.....	616,673.27	572,233.17	+44,440.10
Profit and loss accounts.....	2,603,260.00	1,934,975.68	+668,284.32
Suspense account.....	77,681.74	1,119,235.81	-1,041,554.07
Liabilities other than above.....	8,499,246.94	8,060,808.06	+438,438.88
Total.....	272,638,277.97	272,392,086.37	+246,189.60

BUREAU OF PRINTING

ACTIVITIES

In accordance with section 1644 of the revised administrative code of 1917 all the printing and binding works required by the insular, provincial, and municipal governments have been executed by this bureau during the fiscal year including electrotype plates ordered by private firms and individuals which can not be done outside of this bureau and several private printing and binding orders requiring high grade workmanship and best quality of materials.

The following is a partial list showing the description, quantity, number, and size of pages of the most important government publications printed during the year:

Title	Quantity	Number of pages	Size of page
GOVERNOR GENERAL			
By-Laws and Rules and Regulations of the Board of Accountancy, board of accountancy.....	200	55	6 x 9½
Auditor's Annual Report, Supplement I, 1927, bureau of audits.....	560	380	9½ x 12½
Message of the Governor General, Dwight F. Davis, to the Eighth Philippine Legislature, second session, 1929 (English) executive appropriation.....	1,706	28	7½ x 10½
Message of the Governor General, Dwight F. Davis, to the Eighth Philippine Legislature, second session, 1929 (Spanish) executive appropriation.....	1,300	32	7½ x 10½
Inaugural Address of Governor General Dwight F. Davis (English and Spanish) executive appropriation.....	4,000	24	7½ x 10½
Budget for 1930, executive appropriation.....	1,206	480	8 x 12
Twenty-ninth Annual Report of the Bureau of Civil Service for 1928, bureau of civil service.....	1,600	178	6 x 9½
Report of the Auditor for the Philippine Islands for the Fiscal Year ended Dec. 31, 1928, central government, bureau of audits.....	650	384	9½ x 12

DEPARTMENT OF THE INTERIOR

The Chemical Composition of Philippine Food Materials, Office of the Public Welfare Commission.....	1,000	20	6 x 9½
Philippine Constabulary Officer's Diary, 1929, Philippine Constabulary.....	500	232	3½ x 5½
Annual Report of the Director of the Philippine General Hospital for 1927, Philippine General Hospital.....	300	144	6 x 9½
Information Regarding Cadetship, Philippine Constabulary.....	1,000	16	4½ x 6½
Official Constabulary Register for 1929, Philippine Constabulary.....	750	168	6 x 9½
Eighth Annual Report of the Public Welfare Commissioner, 1928, Public Welfare Commission.....	1,500	262	6 x 9½
The Chemical Composition of Philippine Food Materials, by F. O. Santos and F. T. Adriano.....	2,000	20	6 x 9½
Officer's Diary for 1930, Philippine Constabulary.....	350	232	3½ x 5½

Title	Quantity	Number of pages	Size of page
DEPARTMENT OF PUBLIC INSTRUCTION			
Monthly Bulletin, Vol. VIII, No. 5, May, 1928, Philippine health service	2,500	56	6 x 9 $\frac{1}{2}$
Philippine Health Service Form No. 169, Health Officer's Diary, Philippine health service	500	248	4 $\frac{1}{4}$ x 6
Monthly Bulletin, Vol. VIII, No. 6, June, 1928, Philippine health service	2,500	64	6 x 9 $\frac{1}{2}$
A Description of Leprosy, Philippine health service	500	124	6 x 9 $\frac{1}{2}$
Regulations Governing Examinations, Appointments, and Promotions of Candidates and Commissioned Officers, Philippine health service	1,000	20	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. VIII, No. 7, July, 1928, Philippine health service	2,500	52	6 x 9 $\frac{1}{2}$
English Composition—A Manual for Use in Philippine Secondary Schools, bureau of education	15,000	48	6 x 9 $\frac{1}{2}$
Fifth Annual Announcement, Summer School, 1929, General Office, University of the Philippines	3,000	28	6 x 9 $\frac{1}{2}$
Selected Short Poems by Representative American Authors, bureau of education	7,000	144	5 x 7 $\frac{1}{2}$
Eighteenth Annual Commencement, Mar. 20, 1928, University of the Philippines	1,000	28	7 $\frac{1}{2}$ x 10 $\frac{1}{2}$
Economic Survey Report, bureau of education	1,000	72	6 x 9 $\frac{1}{2}$
Elementary Home Economics, bureau of education	5,000	330	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. VIII, No. 9, September, 1928, Philippine health service	2,500	64	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. VIII, No. 8, August, 1928, Philippine health service	2,500	56	6 x 9 $\frac{1}{2}$
Annual Report of the Philippine Health Service, 1926, Philippine health service	2,020	448	6 x 9 $\frac{1}{2}$
Bulletin No. 31, School and Home Gardening, bureau of education	3,000	254	6 x 9 $\frac{1}{2}$
Course of Study for Intermediate Grades, bureau of education	3,500	356	6 x 9 $\frac{1}{2}$
Supplementary Physics Questions for the Year 1929-30, bureau of education	10,000	32	6 $\frac{3}{4}$ x 9 $\frac{1}{2}$
Schedule of Classes—First Semester 1929-30, University of the Philippines	3,000	32	5 $\frac{1}{2}$ x 9 $\frac{1}{4}$
P. H. S. Form No. 70 (Manila), Monthly Health Report, Philippine health service	1,000	24	8 $\frac{1}{2}$ x 11
Bulletin No. 14, Announcement, College of Liberal Arts, 1929-30, college of liberal arts, University of the Philippines	1,500	92	6 x 9 $\frac{1}{2}$
Our History, by Rafael Palma (English), University of the Philippines	1,000	32	6 $\frac{3}{4}$ x 10
Our History, by Rafael Palma (Spanish), University of the Philippines	1,000	32	6 $\frac{3}{4}$ x 10
Supplementary Physics Questions for the School Year 1929-30, bureau of education	32,000	32	6 $\frac{3}{4}$ x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. VIII, No. 10, October, 1928, Philippine health service	2,500	112	6 x 9 $\frac{1}{2}$
Approved Library Lists, bureau of education	4,000	614	6 x 9 $\frac{1}{2}$
Opportunities for Seventh Grade Graduates, bureau of education	31,720	82	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. IX, January, 1929, Philippine health service	2,500	44	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. VIII, No. 12, December, 1928, Philippine health service	2,500	56	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, school of forestry, University of the Philippines	200	20	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, 1929-30, college of education, University of the Philippines	1,000	36	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. VIII, No. 11, November, 1928, Philippine health service	2,500	68	6 x 9 $\frac{1}{2}$
Secondary Course of Study in English Composition, bureau of education	2,000	108	6 x 9 $\frac{1}{2}$
Twenty-ninth Annual Report of the Director of Education for 1928, bureau of education	6,000	258	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, 1929-30, school of fine arts, University of the Philippines	200	16	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, 1929-30, school of pharmacy, University of the Philippines	500	32	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, 1929-30, college of law, University of the Philippines	1,000	32	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, 1929-30, college of veterinary science, University of the Philippines	250	20	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, 1929-30, school of dentistry, University of the Philippines	250	20	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, junior college of the University of the Philippines, junior college, University of the Philippines	400	16	6 x 9 $\frac{1}{2}$
Course of Study in Drawing for Normal Schools, bureau of education	1,000	86	8 x 10 $\frac{1}{2}$
Bulletin No. 14, Announcement, conservatory of music, University of the Philippines	1,000	36	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. IX, No. 2, February, 1929, Philippine health service	2,500	44	6 x 9 $\frac{1}{2}$
Monthly Bulletin, Vol. IX, No. 4, April, 1929, Philippine health service	2,500	36	6 x 9 $\frac{1}{2}$
Bulletin No. 14, Announcement, college of agriculture, University of the Philippines	1,000	48	6 x 9 $\frac{1}{2}$
Bulletin No. 14, department of physical education and department of military science and tactics, University of the Philippines	3,000	20	6 x 9 $\frac{1}{2}$

Title	Quantity	Number of pages	Size of page
DEPARTMENT OF PUBLIC INSTRUCTION—continued			
Schedule of Classes, Second Semester, 1929-30, University of the Philippines	3,500	32	Inches 5½ x 9½
Monthly Bulletin, Vol. IX, No. 3, March, 1929, Philippine health service	2,500	48	6 x 9½
Bulletin No. 14, Announcement, college of medicine, University of the Philippines	700	48	6 x 9½
Bulletin No. 14, General Information, 1929-30, general office, University of the Philippines	5,000	60	6 x 9½
Bulletin No. 31, School and Home Gardening, bureau of education	2,000	254	6 x 9½
Monthly Bulletin, Vol. IX, No. 6, June, 1929, Philippine health service	2,500	44	6 x 9½
Monthly Bulletin, Vol. IX, No. 5, May, 1929, Philippine health service	2,500	48	6 x 9½
Bulletin No. 14, Announcement, school of hygiene and public health, college of medicine, University of the Philippines	200	20	6 x 9½
Philippine Prose and Poetry, bureau of education	20,000	168	6 x 7½
Bulletin No. 14, Announcement, college of engineering, University of the Philippines	1,000	40	6 x 9½
Monthly Bulletin, Vol. IX, No. 7, July, 1929, Philippine health service	2,500	64	6 x 9½
Monthly Bulletin, Vol. IX, No. 8, August, 1929, Philippine health service	2,500	36	6 x 9½
Course of Study for Intermediate Grades (1928 Rep.), bureau of education	2,000	356	6 x 9½
Monthly Bulletin, Vol. IX, No. 9, September, 1929, Philippine health service	2,500	36	6 x 9½
Monthly Bulletin, Vol. IX, No. 10, October, 1929, Philippine health service	2,500	32	6 x 9½
DEPARTMENT OF FINANCE			
Public Laws, Vol. 23 (English), bureau of printing executive bureau sales stock	800	604	8 x 12
Municipal Form No. 13, Examination Manual for Municipal Police Service, bureau of printing sales stock	5,000	16	6 x 9½
Public Laws, Vol. 23 (Spanish), bureau of printing executive bureau sales stock	800	612	8 x 12
Auditor's Annual Report, Supplement II, 1927, bureau of printing sales stock	1,126	1,968	6 x 9½
Philippine Reports, Vol. 50 (English), bureau of printing judiciary sales stock	1,500	1,148	6 x 9½
Philippine Reports, Vol. 50 (Spanish), bureau of printing judiciary sales stock	1,500	1,148	6 x 9½
Official Roster, Dec. 31, 1928, bureau of printing sales stock	630	316	6 x 9½
Executive Orders and Proclamations, 1928 (English and Spanish), bureau of printing executive bureau sales stock	300	512	5½ x 8
Gaceta Oficial, Vol. XXVII, Nos. 1-157, bureau of printing sales stock	1,300	4,808	10½ x 14½
Classification, bureau of printing stock	210	132	6 x 9½
Annual Report of the Insular Treasurer of the Philippine Islands for 1928, bureau of the treasury	500	146	6 x 9½
Annual Report of the Insular Collector of Customs, 1928, bureau of customs	2,000	308	6 x 9½
Twenty-fifth Annual Report of the Collector of Internal Revenue, 1928, bureau of internal revenue	1,000	140	6 x 9½
Opinions of the Attorney General of the Philippine Islands, Vol. II, Jan. 1, 1911 to Nov. 30, 1913, bureau of printing sales stock	435	860	6 x 9½
Philippine Tariff Act of 1909, bureau of customs	1,000	192	6 x 9½
Municipal Form No. 10, Manual for Municipal Police (English), bureau of printing sales stock	1,510	128	4 x 6
Official Gazette, Vol. XXVII, Nos. 1-157, bureau of printing sales stock	1,500	4,634	10½ x 14½
DEPARTMENT OF JUSTICE			
P. S. C. Form No. 16, Gas Companies Annual Report, public service commission	1,000	48	9½ x 12
P. S. C. Form No. 49, Water System Annual Report, public service commission	3,000	24	9½ x 12
Brief No. 30895 Bill of Exceptions, "El Gobierno de las Islas Filipinas v. Cenon Abandido et al. (Spanish)," bureau of justice	50	136	6 x 9½
Annual Report of the Attorney General, 1928, bureau of justice	300	90	6 x 9½
P. S. C. Form No. 29 (B), Annual Report, Motor Vehicle Carriers, public service commission	5,000	32	9½ x 12
Brief No. 31838, Jose Gloria etc., bureau of justice	50	16	6 x 9½
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES			
Reprint from the Distribution of Life in the Philippines, bureau of science	100	48	6 x 9½
Do.	100	30	6 x 9½
Bulletin No. 17, North Polar Distances of the Sun for the year 1929, bureau of lands	1,000	32	6 x 9½
The Philippine Journal of Science, Vol. 37, No. 3, bureau of science	1,300	150	7½ x 10½

Title	Quantity	Number of pages	Size of page
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES—contd.			
Circular No. 150, Turkey Raising (English), bureau of agriculture	2,000	16	Inches 6 x 9½
Annual Report (Scientific) of the Weather Bureau, Parts I and II, 1922, weather bureau	700	144	9½ x 12
Ang Magsasakan Filipino, Vol. II, No. 4, December, 1928, bureau of agriculture	4,200	12	9½ x 12
Reprint from the Distribution of Life in the Philippines, bureau of science	100	52	6 x 9½
Philippine Agricultural Review, Vol. XXI, No. 4, fourth quarter, 1928, bureau of agriculture	1,200	148	7½ x 10½
The Most Common Dangerous Communicable Diseases of Animals in the Philippines and Their Prevention (English), bureau of agriculture	5,000	16	6 x 9½
Reprint from the Distribution of Life in the Philippines, bureau of science	100	28	6 x 9½
The Most Common Dangerous Communicable Diseases of Animals in the Philippines and Their Prevention (Tagalog), bureau of agriculture	3,000	16	6 x 9½
Seismological Bulletin for January to June, 1928, weather bureau	500	32	9½ x 12
The Publications of the Observatory of Manila, weather bureau	800	24	9½ x 12
The Most Common Dangerous Communicable Diseases of Animals in the Philippines and Their Prevention (Spanish), bureau of agriculture	5,000	20	6 x 9½
Circular No. 150, La Puericultura (Spanish), bureau of agriculture	1,000	20	6 x 9½
Popular Bulletin No. 1, Preservation of Philippine Foods, bureau of science	5,000	36	6 x 9½
The Philippine Journal of Science, Vol. 37, No. 4, bureau of science	1,300	198	7½ x 10½
W. B. Monthly Bulletin, September to December, 1927, weather bureau	1,000	124	9½ x 12
Annual Report of the Weather Bureau, Parts I and II, 1923 (scientific), weather bureau	700	144	9½ x 12
Reprint from the Philippine Journal of Science, Vol. 37, No. 4, bureau of science	105	148	7½ x 10½
Reprint from the Philippine Journal of Science, Vol. 37, No. 4, bureau of science	205	36	7½ x 10½
Circular No. 130, Notes on Cattle Raising in the Philippines (English), bureau of agriculture	2,000	52	6 x 9½
Circular No. 148, La Industria de Patos en Filipinas (Spanish), bureau of agriculture	1,000	26	6 x 9½
Administrative Order No. 58, An Order Governing the Importation, Bringing or Introduction of Domestic Animals into the Philippine Islands (English), bureau of agriculture	2,000	16	6 x 9½
Administrative Order No. 58, An Order Governing the Importation, Bringing or Introduction of Domestic Animals into the Philippine Islands (Spanish), bureau of agriculture	1,000	16	6 x 9½
Circular No. 151, Artificial Chick Raising (Third Revised Edition), bureau of agriculture	2,000	24	6 x 9½
Ang Magsasakan Filipino, Vol. III, No. 1, January, 1929, bureau of agriculture	4,200	12	9½ x 12
The Philippine Journal of Science, Vol. 33, No. 2, bureau of science	1,300	128	7½ x 10½
The Philippine Journal of Science, Vol. 33, No. 1, bureau of science	1,300	192	7½ x 10½
Annual Report, Scientific, of the Weather Bureau, Part III, 1922, weather bureau	700	364	9½ x 12
Philippine Agricultural Review, Vol. XXII, No. 1, first quarter, bureau of agriculture	1,200	92	7½ x 10½
W. B. Monthly Bulletin, January to April, 1928, weather bureau	1,000	120	9½ x 12
The Philippine Journal of Science, Vol. 38, No. 3, bureau of science	1,300	136	7½ x 10½
Radio Lectures on Agricultural Topics, Vol. IV, bureau of agriculture	500	164	6 x 9½
Twenty-sixth Annual Report of the Bureau of Science, 1927, bureau of science	2,000	84	7½ x 10½
Bulletin No. 44, Vegetable Gardening and Truck Farming in the Philippines, bureau of agriculture	1,000	98	6 x 9½
Annual Report of the Weather Bureau, Part II, 1923 (scientific), weather bureau	700	364	9½ x 12
The Philippine Journal of Science, Vol. 33, No. 4, bureau of science	1,300	244	7½ x 10½
Five-Place Logarithmic Tables, Extracts from American Practical Navigator, bureau of lands	1,000	84	7½ x 10½
Rain in the Philippines, weather bureau	800	20	9½ x 12
Reprint from Philippine Agricultural Review, Vol. XXI, No. 4, fourth quarter, 1928, bureau of agriculture	700	124	6 x 9½
Initial Studies in Atmospheric Electricity at the Manila Observatory, October, 1927, to December, 1928, weather bureau	700	20	9½ x 12
Act 2874—Ley que reforma y compila los Leyes Representes a los Terrenos del Pùblico y que provee a otros fines	2,000	52	6 x 9½
Ang Magsasakan Filipino, Vol. III, second quarter, 1929, bureau of agriculture	4,200	14	9½ x 12
Act 2874—An Act to Amend and Compile the Laws Relative to Lands of the Public Domain and for Other Purposes, bureau of lands	5,500	48	6 x 9½
Philippine Agricultural Review, Vol. XXII, No. 2, second quarter, 1929, bureau of agriculture	1,200	146	7½ x 10½
Bulletin No. 45, A Philippine Rural Credit Primer, bureau of agriculture	1,000	280	6 x 9½

Title	Quantity	Number of pages	Size of page
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES—contd.			
Twenty-seventh Annual Report of the Bureau of Science, 1928, bureau of science.....	2,000	76	<i>Inches</i> $7\frac{1}{2} \times 10\frac{1}{2}$
Miscellaneous Papers on Sugar Cane and Fertilizers, bureau of agriculture.....	1,200	136	$6 \times 9\frac{1}{2}$
Philippine Journal of Science, Vol. 39, Nos. 1-4, bureau of science.....	1,300	560	$7\frac{1}{2} \times 10\frac{1}{2}$
Philippine Journal of Science, Vol. 40, No. 1, bureau of science.....	1,300	186	$7\frac{1}{2} \times 10\frac{1}{2}$
Seismological Bulletin for July to December, 1928, weather bureau.....	500	32	$9\frac{1}{2} \times 12$
Circular No. 94, Poultry Notes (revised), English, bureau of agriculture.....	5,000	66	$6 \times 9\frac{1}{2}$
Annual Report of the Director of Lands, 1928, bureau of lands.....	1,000	178	$6 \times 9\frac{1}{2}$
The Philippine Journal of Science, Vol. 40, No. 2, bureau of science.....	1,300	194	$7\frac{1}{2} \times 10\frac{1}{2}$
Annual Report of the Director of Forestry, 1928, bureau of forestry.....	1,500	280	$6 \times 9\frac{1}{2}$
Twenty-eighth Annual Report of the Bureau of Agriculture for the fiscal year ending Dec. 31, 1928, bureau of agriculture.....	2,000	240	$7\frac{1}{2} \times 10\frac{1}{2}$
The Philippine Journal of Science, Vol. 40, No. 3, bureau of science.....	1,300	204	$7\frac{1}{2} \times 10\frac{1}{2}$
The Philippine Agricultural Review, Vol. XXII, No. 3, third quarter, 1929, bureau of agriculture.....	1,200	136	$7\frac{1}{2} \times 10\frac{1}{2}$
Ang Nagsasakang Filipino, Vol. III, Third Quarter, bureau of agriculture.....	4,200	20	$9\frac{1}{2} \times 12$
Five Place Logarithmic Tables—Extract from Practical Navigator, The American, bureau of lands.....	1,000	84	$7\frac{1}{2} \times 10\frac{1}{2}$
The Philippine Journal of Science, Vol. 40, No. 4, bureau of science.....	1,300	180	$7\frac{1}{2} \times 10\frac{1}{2}$
Reprint from the Philippine Journal of Science, Vol. 40, No. 4, bureau of science.....	110	50	$7\frac{1}{2} \times 10\frac{1}{2}$
Monthly Bulletin, May to August, 1928, weather bureau.....	1,000	120	$9\frac{1}{2} \times 12$
The Philippine Journal of Science, Vol. 41, No. 1, bureau of science.....	1,300	192	$7\frac{1}{2} \times 10\frac{1}{2}$
DEPARTMENT OF COMMERCE AND COMMUNICATIONS			
Statistical Bulletin No. 10 (1928), bureau of commerce and industry.....	2,500	246	$6 \times 9\frac{1}{2}$
Act 3428, Compensation Act (English), bureau of labor.....	200	20	$6 \times 9\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 1, January, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 2, February, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 3, March, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 4, April, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 5, May, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Amendments to the Manual of the Postal and Telegraph Service of 1923, Supplement No. 2, bureau of posts.....	1,500	28	$6 \times 9\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 6, June, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 8, August, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
B. P. W. Bulletin, Vol. 17, No. 1, Jan. 1, 1929, bureau of public works.....	2,500	56	$9\frac{1}{2} \times 12$
Commerce and Industry Journal, Vol. V, No. 9, September, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
H. No. 1859, Act No. 3428 (English), Compensation Law, bureau of labor.....	500	20	$6 \times 9\frac{1}{2}$
Statistical Bulletin No. 11 (1928), bureau of commerce and industry.....	2,500	264	$6 \times 9\frac{1}{2}$
Act No. 3518, An Act amending the Corporation Law (English), bureau of commerce and industry.....	200	20	$6 \times 9\frac{1}{2}$
Act No. 3518, An Act Amending the Corporation Law (Spanish), bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Commerce and Industry Journal, Vol. V, No. 10, October, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
List of Supplies, bureau of supply.....	1,200	48	$6 \times 9\frac{1}{2}$
Commerce and Industry Journal, Vol. V, November, 1929, bureau of commerce and industry.....	2,000	20	$9\frac{1}{2} \times 12\frac{1}{2}$
Trade Information, etc., bureau of commerce and industry.....	2,000	12	$3\frac{3}{4} \times 6$
CITY OF MANILA			
Ordinance No. 1768 (Spanish), municipal board.....	200	52	$6 \times 9\frac{1}{2}$
Ordinance No. 1768 (English), municipal board.....	200	52	$6 \times 9\frac{1}{2}$
PHILIPPINE LEGISLATURE			
Speech of Hon. M. R. Marcos, house of representatives.....	100	20	$6 \times 9\frac{1}{2}$
Appropriation Act for 1929 (Spanish), house of representatives.....	3,036	292	$6 \times 9\frac{1}{2}$
Speech of Hon. Pedro Gil, house of representatives.....	300	20	$6 \times 9\frac{1}{2}$
Speech of Hon. Jose G. Domingo, house of representatives.....	100	24	$6 \times 9\frac{1}{2}$
Speech of Hon. Serafin Marabut, house of representatives.....	300	44	$6 \times 9\frac{1}{2}$
Actas del Senado de Filipinas, Vol. XII (Documento 603.5-13), Philippine senate.....	1,000	478	$9\frac{1}{2} \times 12$
Speech of Hon. Gregorio Anomas, house of representatives.....	500	16	$6 \times 9\frac{1}{2}$
Speech of Hon. Sotero B. Cabahug, house of representatives.....	100	20	$6 \times 9\frac{1}{2}$
House No. 2041 (English) Act No. — house of representatives.....	36	38	$6 \times 9\frac{1}{2}$
C. R. No. 2723, Act No. — (Spanish), house of representatives.....	150	50	$8\frac{3}{4} \times 10\frac{1}{2}$
	50	52	$6 \times 9\frac{1}{2}$

Title	Quantity	Number of pages	Size of page
PHILIPPINE LEGISLATURE—continued			
Diario de Sesiones, Vol. II, No. 78, Eighth Philippine Legislature, 1st session, house of representatives	1,000	42	Inches 9½ x 12
Speech of Hon. Benito Soliven, house of representatives	100	36	6 x 9½
Diario de Sesiones, Vol. III, No. 79, Eighth Philippine Legislature, 1st session, house of representatives	1,000	56	9½ x 12
Act No. 2723, Appropriation Law for Public Works, 1930 (English) house of representatives	36	52	6 x 9½
House No. 2707 (English), house of representatives	36	16	6 x 9½
Senate No. 70 (English), house of representatives	36	22	6 x 9½
C. R. No. 2041 (Spanish), house of representatives	36	40	6 x 9½
H. No. 2723, Act No. 3670 (English), Appropriation for Public Works, 1930, house of representatives	3,000	52	6 x 9½
Regulations of the Philippine Senate (Spanish), Philippine senate	500	92	47½ x 7
C. R. No. 2041, Act No. 3610 (Spanish), house of representatives	3,000	40	6 x 9½
H. No. 2461, Act No. 3638, Appropriation Law for 1930 (English), house of representatives	3,036	290	6 x 9½
Diario de Sesiones, Vol. IV, Nos. 1-66, house of representatives and Philippine senate	1,000	1,011	9½ x 12
PRIVATE FIRMS AND INDIVIDUALS			
Who is Who in the First National Convention of Filipino Business Men, Mr. Isaac Barza	1,000	40	4 x 8
Publications of Manila Observatory, Vol. I, No. 6, Rev. Miguel Selga	800	16	9½ x 12
Publications of Manila Observatory, Rev. Miguel Selga	500	20	9½ x 12
Annual Report of the General Manager, for the Year Ended Dec. 31, 1928, Manila Railroad Co.	1,000	94	8 x 10½
Report of Joint Committee on Pension, Associations of Civil Service Employees, Provincial Treasurers and Auditors	1,000	64	7½ x 10½

The printing and binding work during the year, including the publications listed above, was executed under 15,051 work orders of which 9,606, amounting to ₱1,099,839.63 were for the insular government; 3,523, amounting to ₱282,297.72, for the provincial governments, including the city of Baguio; 1,139, amounting to ₱40,967.51 for the city of Manila; and for private parties, 783, amounting to ₱24,561.77.

The money value of the printing and binding work ordered by each bureau and government office, city of Manila, Provinces, United States Army and Navy, and private firms and individuals is as follows:

Name of customer	Cost of work executed	
	1928	1929
Governor General:		
Bureau of audits	₱12,018.21	₱15,056.07
Board of accountancy	32.45	300.14
General purpose fund		97.32
Bureau of civil service	2,911.43	2,757.19
Executive appropriation	16,650.53	15,375.58
Total	31,612.62	33,586.30
Department of the interior:		
Bureau of non-Christian tribes	622.94	675.55
Philippine general hospital	11,335.15	7,761.89
Southern Island Hospital	44.50	46.60
Philippine Constabulary	15,855.06	15,268.37
Executive bureau	2,384.06	1,615.79
Board of examiners	1,695.55	1,116.05
Philippine board of examiners for civil engineers	6.45	
Board of pharmaceutical examiners and inspectors, Official Gazette	4.84	83.94
Office of the public welfare commission	11,908.11	6,404.87
Metropolitan water district	3,462.45	3,429.79
Total	47,319.11	36,402.85
Department of public instruction:		
Bureau of education	92,298.04	95,720.30
Pension fund		5.60
Philippine health service	34,883.09	44,592.39
Bureau of quarantine service	522.55	710.36

Name of customer	Cost of work executed	
	1928	1929
Department of public instruction—Continued.		
University of the Philippines.	₱ 10,130.16	₱ 10,767.18
College of Agriculture.	1,102.09	1,157.06
College of Engineering.	80.00	80.95
College of Liberal Arts.	109.90	193.15
College of Fine Arts.	17.70	34.20
College of Law.	613.35	327.30
College of Medicine.	1,133.25	1,124.10
College of Veterinary Science.	10.40	47.00
School of Sanitation and Public Health.	51.70	238.80
College of Conservatory of Music.	94.60	110.55
College of Education.	544.30	173.05
Junior College, University of the Philippines, Cebu.	345.31	328.80
Library.	811.35	1,701.49
Forest School.	50.80	40.20
Health College of Medicine.		93.30
University health.		6.75
School of Pharmacy.		43.40
Department of military science.	72.45	
Department of physical education.		91.95
Philippine School of Arts and Trades.	5.50	
Total	142,876.54	157,587.79
Department of finance:		
Bureau of customs.	17,593.41	17,414.19
Bureau of internal revenue.	65,612.31	63,370.94
Treasury bureau.	4,488.26	3,905.64
Bureau of banking.		654.93
Bureau of printing.	9,324.42	8,797.57
Bureau of printing sales stock:		
Stock forms.	392,518.71	237,079.00
Gaceta Oficial.	8,710.00	8,744.52
Official Gazette.	8,773.22	8,653.78
Executive bureau.	13,338.15	15,845.00
Judiciary.	14,335.45	19,433.05
Miscellaneous.	2,703.85	4,712.20
Total	537,897.78	388,613.82
Department of justice:		
Bureau of justice.	25,159.48	21,520.66
Board of public service commissioners.	5,261.44	7,935.38
Inferior courts.	9,247.35	9,601.84
Philippine library and museum:		
National library.		950.73
National museum.		378.38
Bureau of prisons.	4,572.95	3,182.30
Supreme court, clerk.	1,666.68	1,879.87
General land registration.	20,708.62	16,396.58
Gaceta Oficial land notices.	12,868.06	25,437.52
Official Gazette land notices.	15,993.30	20,413.68
Segregation.	31.20	
Total charge of republication.		765.07
Total	97,668.12	108,762.01
Department of agriculture and natural resources		
Department of agriculture and natural resources (Official Gazette).	40.19	
Bureau of agriculture:	4.57	
Rice colonization and plantation fund, Act 2818.	18,500.89	26,550.21
Stock herds and farms.		79.18
Bureau of forestry.	26.60	
Bureau of lands.	9,176.74	10,329.67
Bureau of science.	37,238.89	37,753.16
Weather bureau.	37,575.20	45,949.50
Total	22,077.47	29,333.76
Total	124,640.55	150,004.98
Department of commerce and communications		
Bureau of public works.	34,341.41	32,386.31
Bureau of posts.	134,752.10	110,627.61
Bureau of supply:		
Division of cold storage.	8,392.17	12,060.65
Posts investigating committee.	6,289.97	4,533.02
Bureau of labor.		8.80
Bureau of coast and geodetic survey.	4,569.49	2,111.96
Bureau of commerce and industry.	4,712.90	469.86
Total	13,564.98	16,301.41
Total	206,623.02	178,507.73

Name of customer	Cost of work executed	
	1928	1929
City of Manila:		
Municipal board.....	₱5,065.97	₱3,072.23
Department of city schools.....	1,002.56	1,107.33
The city treasurer.....	19,537.99	7,985.00
The city treasurer (Official Gazette).....	1.40	
Department of engineering and public works.....	4,829.00	5,953.54
Fire department.....	785.30	936.19
Department of law—		
City fiscal.....	783.65	586.96
Court of first instance.....	2,960.04	2,279.79
Notices in the Official Gazette (English and Spanish).....	306.00	126.00
Municipal court.....	1,405.65	2,119.30
Sheriff of Manila.....	428.50	470.75
Department of police.....	2,273.07	1,656.29
Department of finance.....	6,349.56	13,305.08
Office of the physician.....	25.36	155.05
Office of the mayor.....	526.62	403.07
District auditor's office—		
Notices in the Official Gazette (English and Spanish).....	198.80	155.51
Department of public recreation.....	14.03	106.66
Department of assessment.....	581.43	403.16
City sanatorium.....	76.18	76.54
Secret service division of police.....		56.20
Total.....	47,160.11	40,967.51
Philippine Legislature:		
House of representatives.....	45,441.26	36,556.81
Philippine senate.....	9,878.38	9,817.34
Total.....	55,319.64	46,374.15
Provinces:		
Abra.....	2,791.64	2,135.72
Agusan.....	2,463.85	1,288.64
Provincial hospital.....		9.48
Albay.....	12,750.21	9,437.26
Provincial hospital.....	258.34	63.50
Antique.....	5,181.83	3,810.72
Bataan.....	2,648.82	2,692.81
Batanes.....	1,215.12	667.17
Batangas.....	9,201.77	8,317.34
Provincial hospital.....	108.62	7.30
Bohol.....	10,453.93	9,811.88
Bukidnon.....	1,325.18	1,749.34
Bulacan.....	9,813.73	8,214.85
Cagayan.....	5,133.38	4,309.54
Capiz.....	7,535.69	6,617.75
Cotabato.....	2,711.82	1,962.45
Provincial hospital.....	8.00	
Cavite.....	6,578.30	5,738.37
Cebu.....	20,644.46	13,814.01
Camarines Sur.....	9,647.17	5,014.27
Camarines Norte.....	2,338.86	1,902.21
Davao.....	5,098.48	4,040.11
Provincial hospital.....		45.25
Ilocos Norte.....	7,316.19	6,887.83
Ilocos Sur.....	7,859.30	6,168.95
Provincial hospital.....	34.00	11.50
Iloilo.....	22,321.30	12,016.61
Isabela.....	4,109.10	2,989.35
Laguna.....	9,637.85	9,064.76
Provincial hospital.....	150.03	164.64
Lanao.....	3,069.86	1,944.92
Leyte.....	19,554.30	12,130.66
Provincial hospital.....	71.63	
Masbate.....	2,769.31	2,801.14
Mindoro.....	3,130.89	3,369.49
Misamis.....	10,094.24	6,233.65
Mountain.....	4,639.52	4,216.48
Provincial hospital.....	62.00	
Marinduque.....	2,417.80	1,477.40
Negros Occidental.....	12,768.18	10,037.09
Provincial hospital.....	30.99	71.64
Negros Oriental.....	6,003.86	6,339.55
Nueva Ecija.....	9,116.83	9,653.83
Nueva Vizcaya.....	2,679.87	2,059.22
Provincial hospital.....	58.25	30.95
Pampanga.....	9,397.94	6,630.61
Pangasinan.....	21,460.53	22,130.18
Provincial hospital.....	331.77	144.59
Palawan.....	2,135.73	2,350.61

Name of customer	Cost of work executed	
	1928	1929
Provinces—Continued.		
Rizal.....	₱13,072.09	₱6,994.99
Romblon.....	2,562.89	1,931.34
Samar.....	9,226.81	6,312.68
Sorsogon.....	5,939.27	3,742.31
Surigao.....	4,131.13	3,343.37
Sulu.....	2,376.36	2,624.85
Tarlac.....	7,731.71	7,855.56
Provincial hospital.....	264.30	27.22
Tayabas.....	16,617.61	11,912.51
Provincial hospital.....	191.94	172.89
Union.....	6,578.71	5,766.97
Zambales.....	4,866.03	3,315.33
Zamboanga.....	6,879.86	5,565.21
Provincial hospital.....		89.54
City of Baguio.....	1,490.09	2,021.22
Baguio hospital.....		36.61
Total.....	361,059.22	282,297.72
Outside work order:		
Department of the United States Army and Navy.....		18.00
Private firms and individuals.....	30,601.49	24,543.77
Total.....	30,601.49	24,561.77
Grand total.....	1,682,778.20	1,447,666.63

TRAINING OF APPRENTICES

Of the 22 apprentices under instructions at the beginning of the fiscal year, two have finished their apprenticeship and been promoted to junior craftsmen. Only one apprentice has been appointed during the year; the present incumbents are believed to be sufficient to fill the positions left vacant due to retirements and resignations of competent craftsmen.

PERSONNEL

There were 522 employees on the rolls of the bureau of printing on December 31, 1929, as compared with 503 employees on December 31, 1928. This bureau has no native employee of the non-Christian tribes detailed in the special Provinces.

During the year there had been 30 employees dropped from the rolls of this bureau. Of this number, 5 died, 14 voluntarily resigned, 1 retired, 3 transferred and 7 dropped for desertion of posts.

FISCAL OPERATION

The product of the bureau of printing for the fiscal year 1929, as during the previous year, was charged at the same uniform scale of prices, the total amounting to ₱1,195,798.80. During that period the cost of operation was ₱904,343.95, making a profit of ₱291,454.85.

Comparative table of itemized income and expenses of operation of this bureau between the fiscal years 1928 and 1929

	Jan. 1 to Dec. 31, 1928	Jan. 1 to Dec. 31, 1929
INCOME		
Printing and binding services:		
Insular government.....	₱789,541.43	₱792,954.27
Provincial and municipal governments.....	361,687.65	282,283.32
City of Manila.....	47,763.18	40,967.51
Other government offices.....	2,980.65	3,429.79
United States Army and Navy.....		18.00
Private firms and individuals.....	30,601.49	24,543.77
Subtotal.....	1,232,574.40	1,144,196.66

Comparative table of itemized income and expenses of operation of this bureau between the fiscal years 1928 and 1929—Continued

	Jan. 1 to Dec. 31, 1928	Jan. 1 to Dec. 31, 1929
INCOME—continued		
Sales of supplies:		
Documents.....	₱29,674.45	₱20,800.80
Official Gazette.....	14,318.80	14,141.90
Gaceta Oficial.....	14,864.85	11,590.90
Miscellaneous.....	5,124.66	2,201.30
Subtotal.....	63,982.76	48,824.90
Total sales of supplies and services.....	1,296,557.16	1,193,021.56
Deduct cost of goods sold.....	390,247.52	318,574.75
Gross profit on sales.....	906,309.84	874,446.81
Incidental receipts.....	2,255.11	2,053.04
Production account.....	440,879.38	319,298.95
Gross income.....	1,349,444.33	1,195,798.80
EXPENSE		
Salaries of officers and employees.....	58,543.76	56,003.15
Wages of laborers and apprentices.....	444,641.85	448,413.79
Traveling expenses of personnel.....	2,499.94	2,499.99
Freight, express, and delivery service.....	6,051.07	5,019.45
Postal, telephone, telegraph and cable service.....	4,953.70	3,798.54
Illumination and power service.....	863.44	3,930.96
Other services.....	3,315.00	3,577.17
Consumption of supplies and materials.....	389,075.30	318,806.72
Free distribution of documents.....	5,311.35	9,050.50
Maintenance of equipment.....	1,041.03	739.54
Depreciation of equipment.....	38,677.88	51,944.42
Deterioration of supplies and sales stock.....	257.65	147.60
Extraordinary losses.....		412.12
Gross expense.....	955,237.97	904,343.95
Profit on operation.....	394,206.36	291,454.85

Record of deliveries.—The extent of the work of the delivery section is shown by the following table, the corresponding figures for the fiscal years 1913, 1919, and 1928 being also given:

Method of transportation	Number of packages	Pounds	Method of transportation	Number of packages	Pounds
By autotrucks (Manila):					
1913.....	35,423	586,953	1913.....	2,563	365,943
1919.....	38,430	815,364	1919.....	3,084	402,670
1928.....	48,370	937,982	1928.....	4,435	625,931
1929.....	47,994	949,495	1929.....	3,506	521,525
By mail (including periodicals):					
1913.....	134,012	51,063	1913.....	171,996	1,003,950
1919.....	127,792	32,892	1919.....	169,306	1,250,926
1928.....	427,181	65,405	1928.....	479,986	1,629,318
1929.....	438,699	81,124	1929.....	490,190	1,552,144
Total:					

Consumption of materials.—The cost of printing paper (including envelopes, shipping tags, bristol board, cardboard, and tagboard) and all other supplies required for operation and which entered into the product during the year was ₱318,806.72. Included in the consumption of materials for the year are printing inks of various colors, cloth and leather of different kinds for binding purposes, the quantity and cost of which are as follows:

	Quantity	Cost
Printing inks.....	pounds.....	₱4,270.25
Cloth for binding.....	yards.....	12,700.42
Leather for binding.....	skins.....	5,867.88

Quantity of paper consumed during the fiscal years 1903, 1913, 1919, 1928, and 1929

Year	Book, writing, bond, and ledger paper		Bristol board and card- board		Envelopes, number
	Ream	Pound	Sheet	Pound	
1903	7,201	347,164	48,530	15,808	192,000
1913	16,512	850,048	240,592	53,660	5,101,461
1919	24,884	1,146,071	406,267	89,386	6,190,242
1928	26,909	1,149,360	422,424	125,554	8,751,397
1929	22,629	969,200	298,200	87,910	9,138,644

Quantity of books and pamphlets printed and bound.—There have been printed during the year 783,159 pads, 1,656,707 pamphlets having over 16 pages, and 14,468 blank books. A total of 28,048 library books of various sizes ordered for binding only were received.

Appropriation Act No. 3459.—The appropriation for the fiscal year 1929 provided the bureau of printing with the amount of ₱1,163,360. An additional appropriation in the amount of ₱298.54 was allowed this bureau during the year to cover deficit incurred in the allotment of postal, telephone, telegraph, and cable service.

Receipts and expenditures.—The following comparative statement shows the income, cost of operation, including depreciation of machinery and other equipment, and net profits of the bureau during the fiscal years 1903, 1913, 1919, 1928, and 1929, together with the per capita of each year's receipts and expenditures:

Year	Receipts	Expenses	Profits	Per capita upon—	
				Receipts	Expend- itures
1903	₱443,920.20	₱395,446.92	₱48,473.28	0.0518	0.0517
1913	906,002.78	823,104.31	82,898.47	.0973	.0862
1919	1,223,884.96	1,177,007.81	46,877.15	.1159	.1115
1928	1,349,444.33	955,237.97	394,206.36	.1060	.0750
1929	1,195,798.80	904,343.95	291,454.85	.08952	.0677

Status of fiscal affairs.—The following table shows in detail the status of the fiscal affairs of the bureau at the beginning and end of the fiscal year 1929.

	Status Dec. 31, 1928	Status Dec. 31, 1929	Increase	Decrease
Fixed assets:				
Land	₱129,612.00	₱129,612.00		
Buildings	329,572.82	329,572.82		
Machinery and other equipment	917,097.39	884,551.34		₱32,546.05
Accrued depreciation	689,555.60	712,305.59	₱22,719.99	
Capital account	686,696.61	631,430.57	₱22,719.99	32,546.05
Current assets:				
Printing paper	220,616.55	261,070.99	40,454.44	
Other materials	149,034.14	129,425.31		19,608.83
Work in process	23,029.98	33,968.03	10,938.05	
Sales stock	300,651.76	294,471.89		6,179.87
Prepayment	280.97	25.37		255.60
Accounts receivable	253,054.99	291,296.56	38,241.57	
Cash in insular treasury	867,363.07	935,013.78	65,636.71	
Cash in hands of officers	604.44	526.55		77.89
Total	79,889.76	77,770.92	24,003.35	26,122.19
Total of all assets	766,586.37	709,201.49	1,283.36	58,668.24
Liabilities:				
Fixed capital	686,696.61	631,430.57		55,266.04
Current liabilities:				
Accrued leave	41,989.98	46,479.69	4,489.71	
Extra compensation	27,843.80	28,172.20	328.40	
All other	10,055.98	3,119.03		6,936.95
Total liabilities	766,586.37	709,201.49	4,818.11	62,202.99
Reversion of receipts	1,346,255.58	1,202,797.19		143,458.39

Documents and supplies.—Public documents and miscellaneous supplies to the value of ₱48,824.90 were sold during the year.

There was a debit balance for the Official Gazette (English), of ₱885.16; documents, ₱181,528.46; and a credit balance for the Gaceta Oficial (Spanish), of ₱46,689.93. On December 31, 1929, there were 1,212 paid and 154 free subscribers to the Official Gazette and 1,143 paid and 61 free subscribers to the Gaceta Oficial.

Stock forms.—For the purpose of economy and for the convenience of requisitioners, this bureau, in accordance with section 1647 of the administrative code, keeps in its sales stock printed copies of various official and accountable forms regularly used by the insular, provincial and municipal governments. There were printed during the year and delivered into stock, blank forms computed at ₱266,029.75. During the same period issues from stock amounted to ₱281,253.73.

Census reports.—The prompt disposal of 32,759 volumes on hand of the census report of 1918 as recommended in previous annual reports of this bureau by free distribution is reiterated.

The data published therein are becoming unuseful besides the fact that the books are being deteriorated and the space occupied by them in the bodega is badly needed by this bureau to relieve the present congested conditions.

Outstanding obligation.—The outstanding obligations on December 31, 1929, amounting to ₱194,651.69, are divided as follows:

Contingent:

Requisitions for printing paper, equipment, and supplies (estimated) ₱116,880.77

Accounts payable:

Accrued leave earned.....	₱46,479.69
---------------------------	------------

Extra compensation (bonus) earned.....	28,172.20
--	-----------

Unpaid wages.....	125.98
-------------------	--------

Return transportation (Act No. 80).....	300.00
---	--------

Freight on printing and binding shipments.....	1,864.74
--	----------

All other.....	828.31
----------------	--------

Total accounts payable.....	77,770.92
-----------------------------	-----------

Total liabilities.....	194,651.69
------------------------	------------

Respectfully submitted.

MIGUEL UNSON,
Secretary of Finance.

His excellency the GOVERNOR-GENERAL,
Malacadang Palace, Manila.

ANNUAL REPORT OF THE DEPARTMENT OF JUSTICE

MANILA, April 30, 1930.

SIR: Pursuant to the provisions of section 91 of the Administrative Code, I have the honor to submit the following report covering the activities of the department of justice during the year ending December 31, 1929.

OFFICE OF THE DEPARTMENT OF JUSTICE

Personnel.—There were no changes in the personnel of the department of justice during the year 1929.

NEW LEGISLATION

The year under view has seen the enactment by the legislature of a number of important measures affecting the administration of justice. Among these measures the following are worthy of special notice:

1. *Court of appeals.*—S. B. No. 261 and its companion measure, S. B. No. 155, which provides for the establishment of a court of appeals. The enactment of these measures is the result of many years of effort to relieve a situation that has been crying for relief. It has long been recognized that the ends of justice demand that the supreme court be relieved of the work of hearing and determining cases of minor importance, and the creation of a court of appeals, such as provided in the bills mentioned, is generally considered, under the circumstances now prevailing, the most effective means of accomplishing this end. The joint legislative committee of the Philippine and American Bar Associations has strongly recommended the approval of these measures, after conferring on the subject with the chief justice who was designated by the members of the supreme court to act as a committee of one for the purpose. These measures were introduced in the legislature for the first time in 1922 upon the recommendation of the undersigned as secretary of justice with the approval of the then Governor General, Leonard Wood.

2. *Provincial sheriffs.*—Act No. 3598 which provides for the appointment of provincial sheriffs by the secretary of justice. The gross deficiencies of the present system under which the duties pertaining to the office of provincial sheriffs are discharged by the provincial governors through a deputy or deputies are generally recognized. This measure was also strongly recommended by the joint legislative committee of the Philippine and American Bar Associations.

3. *Reorganization of judicial districts.*—Act No. 3627 which provides for the creation of new branches of the courts of first instance in several judicial districts; for the creation of the twenty-ninth judicial district; for the readjustment of the salaries of judges of first instance, the clerks and deputy clerks of courts of first instance; and for additional subordinate personnel for the said courts.

4. *Salaries of justices of the peace of provincial capitals.*—Act No. 3622 which increases the salaries of justices of the peace of provincial capitals.

5. *Provision for additional subordinate court personnel.*—Act No. 3619 which provides for additional subordinate personnel for the courts of first instance, the bureau of justice and the general land registration office.

6. *Assignment of district judges.*—Act No. 3564 which authorizes the secretary of justice to detail a judge of first instance of one district to temporary duty in another district for the purpose of trying all kinds of cases.

7. *Separate prison for female prisoners.*—Act No. 3579 which provides for separate prison for female prisoners.

ADMINISTRATION OF JUSTICE

SUPREME COURT

Personnel.—During the year covered by this report, there has been no change in the judicial personnel of the supreme court.

Business transacted.—During the year 1929 there were 1,824 civil and criminal cases filed which, added to the 1,052 cases pending on December 31, 1928, gave a total of 2,876 cases pending and filed during the same period. During the

same year, 1,873 cases were disposed of by the supreme court, or 46 more than the number disposed of during 1928. There were 930 civil and criminal cases pending submission at the close of business on December 31, 1929, besides the 64 civil cases and the 9 criminal cases pending decision on the same date.

Two hundred and eighty-one applicants were admitted to the bar examinations, of whom eight were absent during the test. Only 156 passed and were admitted to practice.

Two hundred and ninety-six notaries public were appointed by the supreme court during the year 1929, as against 186 appointed during the previous year.

Collections.—The office of the clerk of the supreme court collected fees, fines, court costs, and bar examination fees amounting to ₱38,597.22, which meant an increase of ₱2,257.35 over the collections made during the year 1928.

Administrative charges against judges and attorneys.—Complaints against 44 practicing attorneys were received in the supreme court during the year 1929. Of these 22 were disposed of, and 22 are still pending investigation, recommendation, and report.

Two complaints were filed against two judges of first instance during the same period, one of which has been disposed of, while the other is still pending.

COURTS OF FIRST INSTANCE

Personnel.—A number of transfers, promotions, and new appointments have been made in the judicial personnel of the courts of first instance during the year 1929, as follows:

Judge Ricardo Paras was promoted from the eighteenth district to the third district, effective March 7, 1929;

Judge Juan G. Lesaca was transferred from the third district to the seventh district, effective March 7, 1929;

Judge Mariano Buyson was promoted from his position as auxiliary judge of first instance to that of judge of the eighth district, effective February 27, 1929;

Judge Edmond Block, a private practitioner, was appointed judge of the third branch, ninth district (Manila), to succeed Judge George R. Harvey, retired;

Judge Pedro Tuason was transferred from the fourteenth district to the eleventh judicial district, effective March 11, 1929;

Judge Anastasio R. Teodoro was promoted from the seventh district to the fourteenth district, effective February 18, 1929;

Judge Francisco Enage another private practitioner was appointed judge of the second branch, fourteenth district, effective March 9, 1929;

Judge Mariano de la Rosa, was promoted from his position as auxiliary judge of first instance to that of judge of the eighteenth district, effective March 9, 1929;

Judge Eulalio Garcia, was appointed from his position as provincial fiscal to that of judge of the twenty-first district, effective June 11, 1929;

Judge Leopoldo Rovira, was promoted from the eighth district to the twenty-third district, effective February 20, 1929;

Judge Sixto de la Costa, auxiliary judge of first instance with station at Tagbilaran, Bohol, was transferred to Cabanatuan, Nueva Ecija, effective March 1, 1929;

Judge Ricardo Summers, auxiliary judge of first instance with station at Jolo, Sulu, was transferred to Bacolod, Occidental Negros, effective March 9, 1929;

Judge Sabino Padilla was appointed from his position as assistant to the attorney general to that of auxiliary judge of first instance with station at Jolo, Sulu, effective March 1, 1929;

Judge Fortunato Borromeo was appointed from his position as provincial fiscal of Cebu to that of auxiliary judge of first instance with station at Tagbilaran, Bohol, effective March 4, 1929.

In addition to the above, the following appointments of auxiliary judges were made under Act No. 3433 which created 10 additional positions of auxiliary judges of first instance for the purpose of expediting the disposition of cadastral cases. They are as follows:

Geronimo Paredes, appointed from his position as provincial fiscal of Nueva Ecija to that of auxiliary judge of first instance with station at Tuguegarao, Cagayan, effective March 2, 1929;

Dionisio de Leon, an attorney for the Philippine National Bank, appointed auxiliary judge of first instance with station at Vigan, Ilocos Sur, effective March 1, 1929;

Pastor Endencia, appointed from his position as provincial fiscal of Pangasinan to that of auxiliary judge of first instance with station at Lingayen, Pangasinan, effective March 1, 1929;

Pedro M. Sison, a private practitioner, appointed auxiliary judge of first instance with station at Cabanatuan, Nueva Ecija, effective February 28, 1929;

Mariano A. Albert, appointed from his position as assistant fiscal, city of Manila, to that of auxiliary judge of first instance with station at Santa Cruz, Laguna, effective March 1, 1929;

Braulio Bojasa, appointed from his position as assistant to the attorney general to that of auxiliary judge of first instance with station at Lucena, Tayabas, effective March 1, 1929;

Conrado Barrios, appointed from his position as provincial fiscal of Iloilo to that of auxiliary judge of first instance with station at Capiz, Capiz, effective March 1, 1929;

Jose M. Hontiveros, another private practitioner, appointed auxiliary judge of first instance with station at San Jose, Antique, effective February 14, 1929;

Buenaventura Ocampo, appointed from his position as provincial fiscal of Bulacan to that of auxiliary judge of first instance with station at Zamboanga, Zamboanga, effective June 11, 1929;

Francisco Zulueta, appointed from his position as provincial fiscal of Occidental Negros to that of auxiliary judge of first instance with station at Davao, Davao, effective June 11, 1929;

Serafin Hilado, a private practitioner, appointed auxiliary judge of first instance and rendered services in the bench from February 18, 1929, until April 3 of the same year, when he was appointed and qualified as director of lands;

Jose Lopez Vito, a prominent member of the Iloilo and Negros Bar, and Vicente Vera, ex-senator and practicing attorney, were likewise appointed auxiliary judges of first instance, but they declined their appointments.

During the year 1929, two vacancies occurred in the positions of judges of first instance, namely: That of the twenty-first judicial district, formerly occupied by Judge Nicolas Capistrano who retired on January 27, 1929, upon reaching the statutory age limit, and that of the position of auxiliary judge with station at Davao, Davao, formerly occupied by Judge Francisco Zulueta, who resigned on June 22, 1929, to become a candidate for a seat in the upper house of the legislature. For reasons of economy, the position vacated by Judge Francisco Zulueta remained unfilled during the remaining portion of the year 1929.

Business transacted.—At the beginning of the year 1929, there were 22,853 civil and criminal cases pending in the courts of first instance throughout the islands, as against 21,232 civil and criminal cases pending on January 1, 1928, and during that year there were 25,235 civil and criminal cases filed as against 23,226 civil and criminal cases filed during 1928. These figures show an increase over those of last year of 1,621 in the number of cases pending, and of 2,009 in the number of cases filed. The two figures given for 1929 make a total of 48,088 cases pending and filed during said year, or an increase of 3,630 over the figures corresponding to 1928. During the same period, the different courts of first instance altogether disposed of 24,909 cases of all kinds, or an increase of 1,818 cases over the corresponding figures for 1928. After deducting this number from the total of cases pending and filed (48,088), there remains a total of 23,179 cases pending in all the courts of first instance of these islands at the close of the year 1929.

To give a more graphic comparison of the activities of the courts of first instance during the year 1929 with those of the year 1928, the following table is given:

Year	Pending at beginning of year	Filed during year	Disposed of during year	Pending at end of year
1929.....	22,853	25,235	24,909	23,179
1928.....	21,232	23,226	23,091	21,367
Difference.....	1 1,621	1 2,009	1 1,818	1 1,812

¹ Increase.

The increase in the number of cases disposed of can be traced to the action taken by the department of justice in detailing more judges in the courts where the congestion of cases made such step necessary, with the result that of the 1,170 cases pending in the Province of Tayabas at the end of May, 1929, there remained only 951 cases at the end of December of the same year; in the Province of Capiz there were 548 cases at the end of May, which number was reduced to 490 at the end of December; in the Province of Antique there were 180 cases at the end of May, and before the close of the year that number was reduced to 143; in the

Province of Laguna, at the end of May there were 1,072, but by the assignment of an additional judge, that figure was reduced to 886 cases at the end of December; the Province of Nueva Ecija was one of the Provinces having a congested docket (1,213 cases at the end of May, 1929), but at the close of the year the number of cases pending therein was reduced to 785; in the Province of Pangasinan there were 1,153 cases at the end of May, but at the end of December of last year the figure was reduced to 883; even the Province of La Union reported 208 cases as pending at the end of May. This was, however, reduced to 135 cases at the end of December; and even the court of first instance of Manila was able to reduce its 3,313 cases pending at the end of May to 3,142 at the end of December.

This progress of the activities of our courts is noticeable not only in connection with the disposition of ordinary cases but also in the determination of cadastral cases, as may be seen in the figures given below:

Cadastral lots tried:

	Noncontested	Contested
1929.....	35,272	6,521
1928.....	17,706	2,332
Increase.....	17,566	4,189

The enactment of Act No. 3433, by virtue of which 10 additional judges of first instance were appointed in 1929, made possible this tremendous increase in the number of cadastral lots tried by our courts. About 14 judges were assigned to cadastral work in 13 Provinces, such as Capiz, Tayabas, Laguna, Leyte, Occidental Negros, Bulacan, Albay, Pampanga, Nueva Ecija, Cagayan, Pangasinan, La Union, and Misamis, where there were numerous pending cadastral cases requiring immediate action by the courts. The combined efforts of this office and the judges detailed to those Provinces during the year 1929 resulted in the termination of the hearing of 35,272 noncontested lots and 6,521 contested lots, showing an increase of 17,566 and 4,189, respectively, over the figures reported for 1928.

Taking into consideration the fact that a contested lot is heard by the court almost in the same manner as any ordinary civil case, the 6,521 contested lots disposed of by the courts may be added to the number of ordinary cases disposed of by them, in which case the total number of ordinary cases disposed of by the courts of first instance during the year 1929 will reach a grand total of 31,430.

Vacation judges.—In pursuance of the authority granted by section 172 of the revised administrative code, 21 judges of first instance were by administrative order No. 31 of this department, assigned to duty during the vacation period of the court (April and May), and were authorized and instructed to hold special terms of court in their respective places of assignment, for the purpose of carrying on the work of the courts of first instance in the city of Manila and in the provinces during those months, and as necessity and circumstances demanded, other judges, besides those listed in said administrative order No. 31, were likewise instructed to hold court at such places as the interest of the administration of justice required.

Receipts and expenditures.—The sum of ₱365,139.93 was the total collection of the court of first instance during the year 1929, which is ₱4,393.81 more than the receipts registered during the fiscal year 1928. This increase may be attributed partly to the enforcement of Act No. 3395 amending section 788 of the code of civil procedure, providing for a new schedule of fees to be collected by the clerks of courts, and also to the fact already mentioned elsewhere in this report that 2,009 more cases were filed in 1929 than during the previous year. The above-mentioned amount does not include, however, the collections of the justices of the peace courts which, under the provisions of section 225 of the administrative code, are taken up in the books of the bureau of internal revenue.

The expenses for salaries and wages and other miscellaneous expenses of the courts of first instance and justice of the peace courts for the year 1929 required an appropriation of ₱2,042,269.53, or an increase of ₱86,819.72 over the sum appropriated for similar purpose during the year 1928, said increase being due to the increase of judges and subordinate personnel of the courts.

In this connection, it may not be amiss to state that the per capita expense of the administration of justice in the Philippine Islands, taking as basis the funds appropriated for the operation of the supreme court, the courts of first instance and the justice of the peace courts during the year 1929, on an estimated population of 12,494,045 inhabitants, is ₱0.182.

JUSTICE OF THE PEACE COURTS

Personnel.—There were 176 appointments of justices of the peace, auxiliary justice of the peace and ex-officio justices of the peace made during the year 1929, as compared with 113 appointments made during the previous year. During the same period, 3 justices of the peace were removed from the service for cause, 3 others were required to resign, while 8 justices of the peace were reprimanded for minor irregularities and 3 were temporarily suspended from office.

Business transacted.—A supplementary report covering the business transacted by the justice of the peace courts during the year 1929 will be submitted to his excellency, the Governor General, as soon as complete data are received from all the justices of the peace.

BUREAU OF JUSTICE

Personnel.—During the year 1929, and as a result of the promotions to the bench of assistant attorneys Braulio Bejasa and Sabino Padilla, eight of the assistant attorneys composing the legal staff of the office of the attorney general were correspondingly promoted in rank and salary. They are attorneys Cesar Bengson, Diego Locsin, Salvador Abad Santos, Ramon Quisumbing, Catalino Buenaventura, Felipe Natividad, Emilio Rilloraza, and Arsenio Paez. In view of the above promotions, the three vacancies of assistant attorneys were filled by the appointment of Messrs. Marcial P. Lichauco, Roberto Concepcion, and Pompeyo Diaz.

Special assignments.—During the year 1929, and in the interest of the public service, several attorneys of the bureau of justice were detached from their regular work to perform special duties in other branches of the government or in the Provinces, namely:

Assistant Attorney Emilio Poña was designated by the ~~Department~~ of justice to preside over the first branch of the municipal court, beginning from July 23 until August 3, 1929, during the absence of Judge Bernabe of said court,

Assistant Attorney Salvador Abad Santos was ordered to attend the convention of fiscals at Baguio where he delivered on April 17, 1929, an address on special laws, particularly the internal revenue laws.

Assistant Attorney Catalino Buenaventura also delivered a lecture on April 9, 1929, before the convention of fiscals at Baguio, on the subject of land registration and cadastral cases; moreover, he often personally attended the hearings of several important civil litigations pending in the courts of first instance of Rizal, Pangasinan, Cavite, and Baguio.

Assistant Attorney Antonio Cuyugan was detailed to Nueva Ecija to assist the provincial fiscal thereof in the investigation of a certain criminal case pending in said province.

Assistant Attorney Felipe Natividad was detailed to assist the provincial fiscal of Tayabas in the prosecution of a certain criminal case for falsification of public documents pending in the court of first instance thereof. Subsequently, he was designated to act as chairman of a committee created by the secretary of finance to investigate the bureaus of printing and customs, for which reason he was relieved of his regular work during his special assignment.

Assistant Attorney Francisco Ventura was, pursuant to the request of the office of the Governor General, detailed to assist the provincial fiscal of Iloilo in the prosecution of a criminal case for rape against the provincial warden of said province and subsequently, was appointed special investigator of the attorney general to investigate certain charges preferred against the municipal president of Binmaley, Pangasinan.

Assistant Attorney Arsenio Paez was detailed on January 29, 1929, to be the legal adviser of a committee created by the department of commerce and communications to investigate the affairs of the Engineer Island of the bureau of commerce and industry. Subsequently, he was made a regular member and acting chairman thereof. Then, on May 6, 1929, he was detailed to render service to the bureau of posts investigating committee, for which reason and upon the request of the secretary of commerce and communications, he was relieved from all his regular work in the bureau of justice.

Finally, Mr. Leon Rivera, then a special attorney of the bureau of justice, was, upon the request of the office of the Governor General, ordered to assist the provincial fiscal of Capiz in connection with the investigation of certain charges against an attorney at law, who was accused of estafa in connection with the estate of a deceased person.

Business transacted.—As law officer of the Philippine government and its officers, the attorney general rendered during the year 238 written opinions to several government officials and entities, including the Governor General, the

heads of the executive departments, the presiding officers of the legislative chambers, the chiefs of bureaus and offices, and other provincial officials.

During the year 1929, a total of 108,660 official communications were disposed of and 22 circular letters were issued by the bureau of justice, while a number of contracts and deeds were examined and passed upon by the bureau of justice. One hundred twenty-five civil cases, of which eight were pending in the municipal court and the rest in the court of first instance of Manila, were handled by the representatives of the bureau of justice. And during the same period five cases of foreclosure of mortgage for the Postal Savings Bank and the Bureau of Lands, involving the sums of ₱84,512.18 and ₱114,235.48, respectively, were handled by the office of the attorney general. Two hundred eighty-five oppositions were filed on behalf of the director of lands in 3,788 land-registration cases referred to the bureau of justice for attention and examination and 93 claims were interposed in 206 cadastral cases.

As regards citizenship cases, the bureau of justice intervened in 42 petitions for naturalization, including those which were pending at the close of 1928. Of the 42 petitions for citizenship, 26 were granted, 1 was dismissed, and 10 were pending decision at the end of the year 1929.

There were 572 printed briefs, 235 arguments, and 1,096 motions filed in the supreme court. Of the 572 briefs, 498 were filed in appealed criminal cases and the remaining 74 were filed in appealed civil cases. Of the 74 appealed civil cases, the government was the appellant in 38 of them and was the appellee in the rest.

Seven extradition cases were handled by the bureau of justice during the year 1929. The most important of these cases is the one concerning Joseph Louis Wilson, who was charged in the court of first instance of Manila in criminal cases Nos. 35408, 35426, 35447, and 35473 for (1) falsification of a telegraphic dispatch, (2) estafa (embezzlement) through falsification of a mercantile document, (3) falsification of a mercantile document, and (4) estafa (embezzlement), respectively, and was convicted in all of the cases on June 4, 1928. He appealed and was admitted to bail, but during the pendency of his appeal he left the Philippine Islands on February 22, 1929, under the assumed names of Alejo Bergoña and Alejo Bergonza for the Portuguese Colony of Macao in China. Under such circumstances, the attorney general on March 7, 1929, moved for the dismissal of the appeal so interposed. Said motion was granted and when the sentence became final, the supreme court returned the corresponding records on March 12, 1929, to the court of origin for the execution of the sentence. On March 18, 1929, the court of first instance of Manila ordered the appearance of said accused but having failed to appear, said court, on motion of the attorney general, ordered his arrest and the confiscation of the bond so filed for his provisional release during the pendency of his appeal. Due to the importance and seriousness of the offenses committed by Wilson, his extradition was requested and ordered. He was accordingly brought back to the Philippine Islands and is already serving the corresponding sentence against him.

The collection cases handled by the bureau of justice for the different bureaus, offices, and branches of the government involved an aggregate amount of ₱182,499.64, of which ₱109,335.40, ₱38,918.37, and ₱12,828.89 belonged to the bureaus of internal revenue, posts, and lands, respectively.

By reference from the supreme court, the bureau of justice examined 31 bail bonds filed by appellant in criminal cases, recommending the approval of 29 of them. The aggregate amount involved in these bonds is ₱177,750.

During the year 1929 the bureau of justice intervened in 70 public-auction sales effected by sheriffs on either the properties of the bondsmen due to the disappearance of the accused, or the properties of the accused themselves, due to their unwillingness or inability to pay court fees, fines, and costs imposed upon them by the courts. From said sales adjudication of properties to the government of the Philippine Islands was obtained in the aggregate value of ₱42,472.21, except in 27 cases which, at the close of business on December 31, 1929, were still pending execution. Properties to the value of ₱511 were sold to private parties.

Inspection.—The attorney general, accompanying the Vice Governor General, inspected the provinces of Palawan and Iloilo.

Receipts and expenditures.—The income of the bureau of justice during the year 1929 amounted to ₱4,725.64 or ₱1,523.14 more than that of 1928. The increase for the year 1929 was largely due to the adjustment made of the amounts which were charged to accounts payable during the previous years, which amounts remained unexpended for the purposes they were intended.

Administration of estates of deceased Americans.—During the year 1929, and under the provisions of section 1667 of the administrative code, as amended by

Act No. 2996 of the Philippine Legislature, the attorney general undertook the administration of the estates of 161 deceased Americans, including 67 new cases received during said period. Of this number of estates, 84 were closed and 77 were in process of settlement at the close of the year 1929.

On December 31, 1928, the balance of funds of estates of deceased Americans amounted to P23,365.18, while the receipts during the year 1929 amounted to P14,410.58, which make a total of P37,775.76.

In this connection, it may be stated that on November 22, 1929, and upon the recommendation of the attorney general, Act No. 3545 was approved, imposing upon the bureau of justice the additional duty, whenever requested by the local branch of the United States Veterans Bureau, to represent it in all court proceedings wherein petitions are filed for the appointment by the judge of the court of first instance of a province of guardians for the persons and estates, or either of them, of minors who are beneficiaries of the United States Veterans' Bureau and who are inhabitants or residents of the Province or who reside without the Philippine Islands and have estates within the Province.

Provincial fiscals.—On account of the promotion to the judiciary of provincial fiscals Fortunato Borromco of Cebu, Pastor Endencia of Pangasinan, Eulalio Garcia of Tayabas, Buenaventura Ocampo of Bulacan, and Geronimo Paredes of Nueva Ecija, several provincial fiscals were promoted in rank and salary, and the vacancies thus created were filled by the appointment of Mr. Antonio Belmonte as provincial fiscal of Cavite, Mr. Jose Evangelista as provincial fiscal of Antique, Mr. Catalino Cailipan as provincial fiscal of Mindoro, Mr. Higinio Macadaog as provincial fiscal of Nueva Vizcaya, and Mr. Antonio Lacson as provincial fiscal of Palawan. Due to the fact that these appointments have not been acted upon by the senate during the 1929 session, the five persons named above had to be reappointed to the same positions on November 13, 1929, effective as of November 9 of the same year. The position of provincial fiscal of Bataan remained vacant during the whole year 1929, while that of Zamboanga was temporarily filled by the appointment of a local attorney.

During the last session of the legislature, Act No. 3580 was passed, amending section 1673 of the administrative code, providing that no person shall hereafter be appointed to the position of provincial fiscal unless he has been duly admitted to practice in the courts of the Philippine Islands and has been in actual private practice for at least four years prior to his appointment. The new law also provides that no fiscal shall continue in office after he attains the age of 60 years.

Office of the city fiscal of Manila.—Promotions in the line of the legal staff of assistants to the city fiscal of Manila were made on account of the appointment of Mr. Mariano Albert as auxiliary judge of first instance, effective March, 1929. The vacancy thus created was filled by the appointment of Mr. Lorenzo M. Tanada as seventh assistant fiscal.

During the year 1929, the office of the city fiscal of Manila handled 24,477 cases, involving 27,642 accused persons, by virtue of complaints presented, and filed 21,190 criminal complaints. During the same period, said office dropped, after investigation, 3,287 complaints. There were 2,579 cases filed in the municipal court, and 1,878 cases filed in the court of first instance, including 1,122 appealed cases from the municipal court.

Convention of fiscals.—The third convention of prosecuting officers or provincial fiscals was held in the city of Baguio from April 8 to 20, 1929, being attended by 28 provincial fiscals and 1 assistant fiscal for the city of Manila. The convention discussed and passed resolutions touching many problems pertaining to the performance of the duties of public prosecutors and listened to the addresses delivered by the Acting Governor General, the president of the senate, the chief justice of the supreme court, the secretary of justice, the undersecretary of justice, the secretary of the interior, the judge of the fourth judicial district, and other officials.

GENERAL LAND REGISTRATION OFFICE

Personnel.—Nine registers of deeds were appointed during the year 1929, namely, Pio G. Diose for Antique, Fernando J. Rivera for Bataan, Antonio Ochoa Rodriguez for Cagayan, Salvador Villaruz for Capiz, Miguel Viloria for La Union, Mariano Cordova for Occidental Negros, Fernando Pacana for Oriental Misamis, Filomeno Singson for Samar, and Marcelo M. Sibol for Tarlac. During the same period, one register of deeds, Mr. Pastor Salo of Cagayan, died, and four others, Messrs. Carlos Z. Abiera of Antique, Alfredo Castro of Tarlac, Antonio Lacson of Oriental Negros, and Jose M. Millares of Occidental Negros, resigned.

Business transacted.—During the year covered by this report, 23,143 decrees were issued, 2,803 of which were issued in ordinary land cases, and 20,340 in cadastral cases. Said decrees comprised an aggregate of 27,180 lots which cover an area of 78,879.0483 hectares and relate to 2,509 cases. The decrees in the ordinary cases comprised 5,307 lots with an area of 29,145.3073 hectares, while those in cadastral cases include 21,873 lots with an area of 49,732.7410 hectares.

The number of notices issued by the land registration office and published in the Official Gazette pursuant to sections 31 and 32 of Act No. 496, as amended, and sections 7 and 8 of Act 2259, during the last year, was 3,354 affecting 92,641 parties as against 2,006 notices involving 64,121 parties in the year 1928. Last year the land registration office examined for publication 3,971 cases, of which 130 were cadastral cases. There were also examined during the same period a total of 2,509 cases, for the purpose of issuing the corresponding decrees. The number of cases examined required the submission to the courts of 3,125 reports. Tie lines of 4,642 lots of 4,368 plans filed in 2,940 cases were computed during the year, and there were also prepared in connection with the examination of cases for the issuance of decrees, 262 municipal index plans, as a result of the plotting thereon of 4,088 plans in 3,050 cases embracing 6,492 lots with 85,223 corners. Mostly at the request of private parties and upon payment of corresponding fees, 2,981 blue-print copies of plans were made in the land registration office; and in accordance with the decisions rendered in some cadastral cases this office issued last year 175 orders to registers of deeds for the cancellation of old certificates of title and the issuance of the certificates of title in lieu thereof, so as to have the land described therein conform to the cadastral plan.

During the year 1929 the land registration office prepared and forwarded to various registers of deeds, 21,315 original certificates of title with their corresponding owners' duplicates. The number of certificates of title prepared, as may be seen, does not agree with the number of decrees issued during the year covered by this report, which may be explained by the fact that there was a big number of decrees issued in the year 1928 which were pending in the typewriting section at the close of that year. Those pending decrees were disposed of at the beginning of the year 1929.

There were received and indexed 3,401 duplicate records of the land registration cases filed in the provinces as against 2,135 in the preceding year. Said number differs slightly from the actual number of applications in the provinces, inasmuch as some of these presented in the later part of December have been received too late for inclusion in the report.

Ordinary land cases.—The courts of first instance disposed of, during the year 1929, 3,264 cases, or 1,312 more cases than those disposed of during the year 1928. The applications were granted in 3,065 of these cases, denied in 37, and dismissed in 162. Appeals were filed to the supreme court in 65 cases, of which 42 have been disposed of, the supreme court affirming the decisions of the lower court in 26 cases and reversing them in 5 other cases, while appeals in 11 cases were dismissed for lack of action of the parties.

The following table shows the status of all ordinary cases on December 31, 1929:

Status on Dec. 31, 1929	Number of applications			
	Granted	Denied	Dismissed	Total
Final disposition.....	2,742	31	141	2,914
Decided, but subject to appeal.....	294	2	18	314
On appeal to supreme court.....	29	4	3	36
Total cases decided by the lower court during the year.....	3,065	37	162	3,264
Previously decided, but subject to appeal.....	5	1	2	8
Previous appeals pending.....	25	5	9	39
Prior final disposition made.....	28,118	552	1,870	30,540
Total business transacted.....	31,213	595	2,048	33,851
Pending on the docket.....				2,656
Total cases filed up to Dec. 31, 1929.....				36,507

Cadastral cases.—There were 67 cadastral cases filed during the year 1929 comprising 36,424 lots, against 85 cases with 46,971 lots in the preceding year. At present there is a total of 1,092 cadastral cases involving 683,324 lots. The following statement shows the status of cadastral cases on December 31, 1929:

	Number of lots
Pending in the courts of first instance on Jan. 1, 1929	249,755
Comprised in cases instituted during the year 1929	36,424
Decided by the courts during the year 1929	35,381
Pending in the courts on Dec. 31, 1929	250,798

Registration of deeds.—The following table gives a résumé of the work accomplished by registers of deeds during the years 1928 and 1929:

Work accomplished	1928	1929
Certificates of title issued:		
Pursuant to decrees	50,687	23,499
Pursuant to patents	1,206	1,576
Pursuant to deeds transfer	14,346	17,538
Instruments recorded under Act 496:		
Deeds of sale	10,792	13,810
Deeds of mortgage	6,294	7,075
Other instruments	12,180	13,325
Instruments recorded under the Spanish mortgage law:		
Deeds of sale	443	500
Deeds of mortgage	54	38
Other instruments	118	235
Instruments recorded under Act 3344:		
Deeds of sale	8,955	10,765
Deeds of mortgage	1,375	2,127
Other instruments	2,486	3,094
Number of instruments recorded under the chattel mortgage law	9,678	16,392
Number of professional certificates recorded	74	44
Number of certificates of apportionment of water according to priority recorded	145	1,861
Number of certificates of water rights recorded	8	5

It will be noted that transactions in the offices of registers of deeds have increased in almost every item during the year 1929 with the exception of the number of original certificates of title issued pursuant to the decrees. But this is only apparent, as the actual number of certificates issued was 85,704, the difference of 62,205 being the certificates that were pending delivery by the municipal treasurer to their owners at the end of the year. In this connection we quote from the report of the chief of the general land registration office, the following:

"This is a serious problem which is confronting this office, as there is no provision of law under which the owners may be compelled to secure their titles from the municipal treasurer. Notices are constantly sent to them without result. The reason seems to be that a great many owners purposely let their titles remain in the hands of the government, much safer than in theirs, until such time as they need them.

"In order to remedy this condition, this office drafted a bill which was submitted to the department of justice some time in October of last year. It is understood that the bill was referred to the attorney general for comment. A copy of said bill is attached to this report."

The bill mentioned in the above-quoted paragraph was referred to the attorney general for examination and recommendation, and should the legal officer of the government recommend its enactment, it will be submitted to the legislature.

PUBLIC SERVICE COMMISSION

Organization and personnel.—During the year 1929, the personnel of the public service commission consisted of 56 officers and employees, including the commissioners, but excluding the special inspectors, such as the district engineers designated to enforce the public service law and the regulations of the commission. There was hardly any important change in the personnel, except that made by the appointment of a new deputy secretary and interpreter to fill the place vacated by the former incumbent, who resigned. Five new inspectors were, however, appointed under the appropriation act for 1929, the appointees being selected among electrical engineers, because there is an increase in the number of electric plants throughout the islands.

The commissioners continued their practice of holding frequent conferences among themselves in order to consider questions which directly affect the policies

of the commission. The arrangement made whereby the entire archipelago was divided into three groups, each group under one commissioner, was continued, to wit: Under Judge Cui: Mindanao, Sulu, Bohl, Samar, Sorsogon, Albay, Camarines Sur, Camarines Norte, and the municipalities of western Leyte; under Judge del Rosario: Cebu, Tayabas, Batangas, Cavite, Bulacan, Zambales, Masbato, Laguna, Manila, Rizal, Bataan, and Pampanga; and under Judge Cruz: Batanes, Cagayan, Isabela, Abra, Tarlac, Mindoro, Romblon, Panay, Palawan, Cuyo, Ilocos Norte, Ilocos Sur, Nueva Vizcaya, Nueva Ecija, Mountain Province, Occidental Negros, Oriental Negros, Marinduque, Pangasinan, La Union, and the municipalities of eastern Leyte.

In addition to the above, it should be stated that all applications affecting rates of steamships and railroads continued to be under the control of the senior commissioner, while applications affecting electric plants, ice plants, water, radio, and telephones coming from the city of Manila continued to be under the control of Judge Cruz.

Legislation.—The public service commissioners are again renewing their request that a bill providing for the annual payment of certificate fees on all public services be presented to the legislature for favorable consideration. In this measure a new schedule of certificate fees is provided for. Under the present law, owners of electric plants, ice plants, and like services pay only ₱0.25 for every ₱1,000 of the capital invested; whereas, autotruck operators generally pay ₱10 for each autotruck depending upon the tonnage capacity of the truck, and in the case of automobile operators ₱5 for each automobile. As stated in the report of the public service commissioner, "There is no justification of the present provisions of the law in requiring owners of electric plants, ice plants, and like services with an invested capital of ₱15,000 to pay ₱3.75 only, while operators of automobiles are required to pay ₱5 as certificate fee for each automobile employed even though the capital invested by the said operator in his business is more or less about ₱3,000 only. The law should be amended in order to equalize the payment of the fees based upon the total amount of capital invested among all classes of operators, irrespective of the kind or nature of the service."

With the approval of the model franchise law, now Act No. 3636, it is most probable that the commission's work in the future, as far as commenting on bills affecting electric plants is concerned, will be reduced. This is one of the important pieces of legislation enacted last year affecting the activities of the commission.

During the session of the legislature, the commission commented upon six senate and 22 house franchise bills which were subsequently passed by the legislature and approved by the Governor General, besides 11 other franchise bills which, for different reasons, were not enacted.

Business transacted.—The total number of cases handled by the commission during the year 1929 was 3,541, which does not include administrative matters which are increasing due to the great number of public services coming under its jurisdiction. In this connection it should be stated that the commission reports that it can not give a correct statistical statement regarding the total number of autotrucks, automobiles, and autojitneys, and the total number of equipments which each particular operator possesses.

The cases handled by the commission are classified as follows: 790 certificates of public convenience or public necessity and convenience, 496 special permits, 185 sales and transfers of business, 417 increases of equipment or capacity, 452 substitutions of equipment, 74 extensions of lines or service, 108 rate cases, 66 conversions of irregular to a regular service, 853 complaints of various kinds, and 98 miscellaneous petitions.

Rate cases.—In 1926 there was a tendency on the part of the public utilities to reduce their existing rates. The Manila Railroad Co. started this movement in order to meet the competition of autotruck operators, and when the railroad was authorized to reduce its rates some autotruck operators began to reduce their rates also. In 1927 it was shown that the average rate for autotruck operators was as low as ₱0.02 per kilometer per passenger, and a review of the present rates would show that there are many operators who are charging now even as low as 1½ centavos for a passenger per kilometer. The most important cases involving reduction of rates handled by the commission during the year 1929 were those submitted by the Manila Railroad Co., the Manila Electric Co., the A. L. Ammon Transportation Co., the Philippine Railway Co., the Pampanga Bus Co., and the Philippine Express (Inc.).

Income and expenditures.—The total expense of the public service commission for the year 1929 was ₱132,557.99, and the total income for the same year was ₱102,712.86. From these amounts it can be seen that the net cost for the maintenance and operation of the commission is only ₱29,845.13. In commenting

upon this reduction of its income, the public service commissioner says that "Its income will be doubled if sufficient field men, such as enough inspectors, be added to its personnel to apprehend violators of its regulations. There are some operators violating the terms and conditions of their certificates of public convenience without being prosecuted. Furthermore, there are many 'colorum cars' which could be apprehended if proper field men are detailed in the service. These 'colorum cars' deprive the government of its lawful income and are at the same time making illegal competition with those duly authorized to operate public services. While it is not the purpose of the commission to become a money collecting agency, it should not, however, be deprived of its lawful sources of income. Moreover, it is just and proper that sufficient protection be given to those who are lawfully authorized to engage in such business."

"In this connection, it may be stated that because of the five new inspectors given to our office, the number of complaints against operators was much greater than the previous year. Thus, the sources from fines and costs of investigation against operators are greatly increased as shown in the financial statement in Appendix B."

BUREAU OF PRISONS

Personnel.—No important changes in the personnel of the bureau of prisons have taken place during the year covered by this report. During the said period, the number of officers and employees in the regular pay roll of the bureau of prisons was as follows: (a) Prison division, 2 officers, 26 clerks, 103 guards, and 18 foremen; (b) Industrial division, 9 clerks and 28 foremen; (c) Iwahig Penal Colony, 2 officers, 1 clerk, and 16 foremen; (d) San Ramon Prison and Penal Farm, 2 officers, 2 clerks, 78 guards, and 3 foremen.

Prison population.—On December 31, 1929, the prison population of the Philippine Islands was 8,714, distributed as follows:

Bilibid Prison.....	3,801
San Ramon Prison and Penal Farm.....	992
Members of trustees' families.....	184
Iwahig Penal Colony.....	1,746
Free colonist.....	1
Members of colonists' families.....	215
Working in Corregidor.....	662
Philippine Constabulary stations.....	103
San Lazaro Insane Asylum.....	21
Police stations, Manila.....	57
Insular prisoners working in provincial jails.....	9
Confined in provincial jails.....	1,323
 Total.....	8,714

The above total shows an increase of 204 prisoners over the total number of prisoners recorded in December 31, 1928, which was 8,510. This increase may be traced to the greater number of prisoners received and the smaller number of prisoners released during the year 1929.

There were 7,243 prisoners confined in the insular prisons on December 31, 1928, while on December 29, 1929, there were 7,391 which number is 148 more than the number registered during the preceding year. In the provincial prisons, the corresponding number was 1,323, which shows an increase of 56 prisoners over the corresponding figure for 1928.

The following is a comparative statement showing the number of prisoners in confinement in the insular and provincial prisons on December 31 of the past six years:

	1924	1925	1926	1927	1928	1929
Bilibid Prison.....	2,474	2,740	2,774	3,210	3,804	3,801
Iwahig Penal Colony.....	1,538	1,360	1,553	1,716	1,686	1,746
San Ramon Prison and Penal Farm.....	628	707	807	973	943	992
Fort Mills Stockade, Corregidor.....	458	526	590	600	608	662
Police stations, Manila.....	52	57	60	59	60	57
Philippine Constabulary stations.....	77	79	87	91	101	103
San Lazaro Insane Asylum.....	28	28	32	34	38	21
Insular prisoners working in provincial jails.....			26	55	3	9
Confined in provincial jails.....	1,237	1,236	1,296	1,361	1,267	1,323
 Total.....	6,593	6,733	7,227	8,104	8,510	8,714

Inasmuch as Bilibid Prison is the main penal institution of the country and the receiving station for practically all convicted prisoners and the distributing center for their assignments, it records the largest number of changes in its population, the average registered during the past year being about 31.24, passing one way or the other through its gates daily, or 1.35 more than that of the preceding year.

The number of commitments received during the year 1929 was 4,521 for Bilibid Prison and 274 for San Ramon Penal Farm, as against 4,546 and 289, respectively, for the year 1928, showing a decrease of 25 commitments for Bilibid Prison and a decrease of 15 commitments for San Ramon Penal Farm. The number of prisoners committed from the Provinces also shows a decrease of 81 from that of the preceding year, while the number of those committed from the Manila courts shows an increase of 56 over that of the preceding year.

According to the director of prisons, 26 cases of violation of conditional pardon were recorded during the year 1929. These cases refer, however, to commitments of prisoners who have been granted conditional pardon in previous years.

The crimes causing the greatest number of commitments have been theft, robbery, homicide, physical injuries, embezzlement, and murder, and a comparison of the number of crimes against person with those against property shows that more persons were convicted of crimes against property than of crimes against person.

The following table would show the number of prisoners committed to Bilibid Prison and San Ramon Penal Farm during the past six years for each of the above-mentioned crimes:

Crime	1924		1925		1926		1927		1928		1929	
	Bili-bid	San Ramon										
Theft-----	783	26	630	24	696	34	764	83	691	60	655	57
Robbery-----	209	40	232	66	307	61	256	114	240	79	307	66
Homicide-----	285	16	229	29	252	43	293	24	275	46	291	34
Physical injuries-----	186	3	213	7	127	7	245	7	231	12	269	11
Embezzlement-----	486	8	301	5	151	9	228	1	169	1	184	7
Murder-----	217	49	220	87	136	58	107	52	79	47	112	55

The number of habitual criminals confined in Bilibid prison during the year 1929 was 354 as against 586 in 1928.

DISCIPLINE AND ORDER

(a) *Bilibid prison.*—Notwithstanding the over-crowded condition of the main prison (Bilibid), the inadequate number of guards and other obstacles encountered by the administration of the institution, the prison authorities were able to enforce both order and discipline within its inclosures. In this connection, particular mention must be made of the fact that the military authorities at Fort Santiago helped the administration in insuring confidence in its staff by furnishing the bureau of prisons with 10 Lewis machine guns.

Only two cases of stabbing of serious nature occurred in Bilibid prison during the year 1929, in both of which cases it proved fatal to the victim. In the first case, the aggressor was prosecuted, convicted of murder and sentenced to death and executed on September 23, 1929, and in the second case, the aggressor was accused of homicide, his case being still pending in the court.

During the year there was one case of suicide which was, however, frustrated. One prisoner escaped from the stockade of Bilibid prison but was later recaptured by the Tarlac constabulary through the information furnished by the Bilibid authorities. Another prisoner while working for the city of Manila under city guards escaped but was recaptured the same day. The most daring attempt on the part of prisoners to dash for liberty occurred shortly after midnight of March 10, 1929, when prisoners Simeon Arizala, Domingo Acasio, and Mauricio Seguira, alias Mauricio Segura, belonging to dormitory No. 13, after sawing away the bars of their cell, crawled out and started to scale the walls of the prison. They were detected by guard Domingo Calauad of post No. 6, who sent an alarm to post No. 5 guarded by Mr. Tranquilino Villanueva. Guard Villanueva halted the fugitives, but seeing that his order was unheeded by the escaping prisoners, he

fired on them killing instantly prisoner Arizala who was in the lead, while the other two prisoners toppled over the walls to Calle Oroquieta adjoining the prison walls. Unable to move because their legs were fractured while dropping to the ground, they both surrendered to the guards and the reserves who had rushed to the scene. Prison guard Tranquilino Villanueva was awarded a medal for the service rendered by him and for his alertness, quick action, and good judgment in preventing the escape of the three prisoners. The most noteworthy of achievements of the trusty police force was the discovery of the frustrated attempt of the former leaders and members of the Pulahanes, Yntrencherados, and Colorums to reorganize their secret societies and to carry on their activities inside the prison wall secretly.

(b) *Ivahig Penal Colony*.—Only 139 cases of delinquency were tried before the summary court, showing therefore a decrease of 11 cases from the figures of 1928. The average number of colonists during the year was 1,750, and the average daily number of violations of rules of the colony was 0.38. Therefore, the average daily delinquency in the colony in 1929 was 0.000218 which, it is believed, is exceptionally low and can favorably be compared with the normal behavior of any civilian community. Nineteen of those who were punished for violating the the rules of the colony were returned to Bilibid prison for confinement and further discipline.

(c) *San Ramon Prison and Penal Farm*.—The prison discipline during the year was thoroughly satisfactory. For the first time in the history of the institution since its reorganization in 1912, during the year 1929 no prisoner who tried to escape made good his attempt. This makes 1929 a very singular year. There was only one attempt to escape and it was frustrated. No cases of prisoners ever attempting to go out of the reservation bent on doing mischiefs in the neighborhood of barrios of the farm, were brought to the attention of the authorities. During the year 401 cases were tried by the summary court and 25 cases by the trusty court as compared with 149 cases tried by the summary court and 20 cases by the trusty court during the year 1928, or an increase of 257 cases. This increase in the number of cases tried in 1929 simply shows added effort on the part of the administration to put up an upright and rigid discipline so essential in the proper administration of penal institutions.

(d) *Fort Mills Stockade, Corregidor*.—The discipline in the stockade has been as a general rule very good during the past year. While a considerable amount of punishment was imposed upon prisoners, much of the penalties were meted out upon a few incorrigible ones who committed very serious offenses. One prisoner escaped from his guard on February 11, 1929, and was recaptured on the same date. One prisoner was shot and instantly killed when he attempted to escape on February 19 of the same year, while another prisoner was stabbed with a dagger by another inmate on October 1, last. His wounds were not, however, serious.

HEALTH AND SANITATION

(a) *Bilibid Prison*.—The sanitation division of the bureau of prisons is composed of 2 physicians, 1 pharmacist, 1 dentist, 1 male nurse, 1 female nurse, 1 sanitary inspector, and 3 hospital attendants. Notwithstanding the difficulties encountered in the strict enforcement of sanitary measures due to the overcrowded conditions of the prison, not one case of cholera, smallpox, or typhoid fever has been registered. The prevailing diseases registered during the year, according to the report of the chief of the sanitation division, were the following:

1. Respiratory diseases, such as pneumonia, bronchitis, pulmonary tuberculosis, etc.
2. Intestinal diseases, such as amoebic dysentery and enteritis of undetermined cause.
3. Influenza of mixed type.

During the year 256 cases of death among the prisoners were recorded. This number does not include 1 who was executed, 2 who were stabbed by their fellow inmates, and 1 who was shot in attempting to escape with 2 others. Of the 256 cases of death, 108 were due to tuberculosis, 66 to pneumonia, and the rest to other diseases.

It is noted that the prevalence of tuberculosis and pneumonia in the Bilibid Prison is the natural result of the congested condition of the prison. The total number of cases admitted to the prison hospital was 6,045, of which 102 underwent major operations and 435 minor operations. Dental treatment was given to 2,900 cases not only to prisoners confined in Bilibid Prison but also to those serving sentences in the penal colonies.

There were 22,919 prescriptions filled in the pharmacy of the hospital, while the laboratory examination recorded a total of 10,038 cases of various kinds.

In this connection it may not be amiss to state that the good sanitary condition of the Bilibid Prison has elicited very favorable remarks from many persons who have visited the institution during the year 1929.

(b) *Iwahig Penal Colony*.—The colony hospital is administered by one resident physician and one nurse. The general health condition of the inhabitants of the colony has been fair. There were recorded 61 cases of deaths among the colonists, of which 16 were due to pulmonary tuberculosis. The daily average number of cases admitted to the hospital was 4, while the total patients admitted during the year was 2,109.

(c) *San Ramon Penal Farm*.—One resident physician and one colony nurse are in charge of the health and sanitation of the colony. It has been excellent during the year just ended. There was no outbreak of any communicable or infectious disease, and the number of cases admitted to the hospital for treatment was only 105, as compared with 124 during the year 1928. There were only 8 cases of deaths registered during the year, as compared with 15 during the year 1928.

Religious services.—On Sundays and religious holidays religious services are conducted in the main prison and in the Iwahig Penal Colony, each of which has two chaplains—a Catholic priest and a priest of the Philippine Independent Church. In the Iwahig Penal Colony a Protestant chaplain was also appointed recently. Prisoners were encouraged to attend religious services and were granted every opportunity to receive religious comfort and spiritual advice and assistance from the ministers of the religion to which they were affiliated. In Bilibid Prison ministers of all religious denominations were allowed to preach their gospel among the prisoners at convenient occasions. In San Ramon Prison and Penal Farm, Father Mariano Ferrer, a Roman Catholic priest, gratuitously and voluntarily rendered religious services for the Christian inmates of the colony, there being no prison chaplain employed there.

Recreation and entertainments.—The inmates in the main prison, as well as in the colonies of Iwahig and San Ramon, were provided with recreation and entertainments. During the year the prisoners' band gave daily concerts. During the last two years the Bilibid band played for the Radio Corporation every Sunday afternoon and Thursday evening without charge, and in return the said corporation furnished the bureau of prisons free of charge with three sets of radiola. Last December the Bilibid band received from the Radio Corporation of the Philippines a Christmas gift of ₱468.09, which was distributed among its members. Athletics was also encouraged, the convicts playing baseball, volley ball, and other athletic games during their leisure hours.

Visitors.—Bilibid Prison continues to be one of the places in Manila most frequented by visitors as shown by the fact that during the year 1929 a total of 22,837 people came for sight-seeing and witnessed the daily afternoon exercises of the prisoners. This number included 776 globe-trotters from the United States and other foreign countries, 2,091 students, school teachers and university students and professors, and also prominent criminologists from abroad, high officials of the government and prominent citizens of the country. On October 18, 1929, Bilibid Prison was honored by the visit of His Excellency, Gov. Gen. Dwight F. Davis. The visitors' registry of Bilibid Prison contains remarks made by foreign visitors commending the institution for its cleanliness, discipline, and good organization.

IMPROVEMENTS AND REPAIRS

(a) *Bilibid Prison*.—During the year 1929 improvements and repairs valued at ₱24,632.31 were made in Bilibid Prison. This amount includes ₱9,105.70 for the erection and painting of one water tank on the hospital grounds with a capacity of 30,000 gallons, and ₱1,052.72 for painting of all buildings, walls, including the repairs of windows and other minor parts.

(b) *Iwahig Penal Colony*.—Notwithstanding the insufficiency of funds necessary for the purchase of needed materials, improvements surpassing those of previous years were made in the colony, particularly in those activities where little or no appropriation was necessary such as the opening and clearing of lands for agricultural purposes.

(c) *San Ramon Prison and Penal Farm*.—The total value of improvements made during the year is ₱31,500, which includes the construction of 1 truss bridge, 104 feet long and 20 feet wide, (₱15,000), 3 trestle bridges, pile driven (₱3,000), 1 smoke copra drying (₱3,000), San Ramon landing (₱2,500), and 1 concrete drying floor (₱3,000).

Prison schools.—In Bilibid Prison day and night classes were conducted under the supervision of 3 civilian teachers assisted by 90 prisoners. The day classes were held from 7 to 9 a. m. and from 1.30 to 2.30 p. m., and the night classes from 6 to 8 p. m. As in previous years attendance to these classes was compulsory for prisoners except for those over 50 years of age or those whose educational attainment is above that given in the prison curriculum. The director of prisons has reason enough to be proud to report that many of those who were entirely illiterate when they entered the prisons, can now read and write. The Philippine library has transferred 332 condemned books to the bureau of prisons without cost.

In San Ramon Prison and Penal Farm night classes were also held, although attendance for the convicts was not compulsory. The teaching force was entirely recruited from the prisoners. The superintendent of San Ramon Prison and Penal Farm reported that a considerable number of non-Christian inmates are now able to write their names through the efforts of their fellow inmates.

Executions.—During the year covered by this report, one prisoner was executed in the death cell of Bilibid Prison under the provisions of Act No. 3104. At the end of the year there were in confinement in Bilibid Prison three persons sentenced to capital punishment whose cases have not been decided by the Supreme Court of the Philippine Islands.

Provincial jails.—Although under section 1707 of the revised Administrative Code the director of prisons has the power of general supervision and control over provincial jails, and to prescribe such rules and regulations as may be necessary for the proper management of the same, in view of the fact that provincial wardens are not under the disciplinary jurisdiction of the director of prisons and are appointed by the provincial governors, it is obvious that it is a task next to impossible to obtain in the provincial prisons the proper observance of prison rules and regulations. The reports of inspection of the provincial commander of the constabulary of each Province, submitted to the bureau of prisons according to law, indicated that prison discipline in some provincial prisons was very lax and left much to be desired. The director of prisons has called the attention of the provincial governors concerned to those facts and made suggestions to them to remedy the situation. In connection with this matter, the director of prisons in his annual report for 1929 says, "I am of the opinion that as long as the immediate control of provincial jails is intrusted to elective officials, no material improvement in their administration can be reasonably expected. I, therefore, suggest, as I have suggested before, that the position of provincial wardens be placed in the classified service and the provincial prisons and their respective jailers transferred to the immediate control and supervision of the insular prison authorities." This is in line with the previous recommendation of the department of justice contained in its annual report for the year 1927. Said recommendation reads as follows: "That the legislature be asked to consider favorably the bill submitted by this office on behalf of the bureau of prisons for the reorganization of the administration of the provincial jails so as to place the office of provincial warden under the provisions of the civil service law, rules and regulations and under the direct supervision of the director of prisons. Under the present organization the provincial warden is an appointee of the governor of the Province and with very rare exceptions the incumbent lacks the qualifications needed for the satisfactory performance of his duties; hence, the very unsatisfactory conditions found in a great majority of our provincial jails. This recommendation is supported by a resolution passed by the convention of the judges."

Financial status.—During the year 1929 the bureau of prisons proper spent a total amount of ₱1,006,925.03, or an increase of ₱44,514.57 over the amount expended during the year 1928. This increase is due mainly to the greater number of prisoners maintained during the year covered by this report. The following table shows the average daily and yearly net cost of maintenance during the year ending December 31, 1929:

Expended for prison division.....	₱1,006,925.03
Expended for industrial division.....	214,700.77
 Deducting:	
Total amount expended for the maintenance and instruction of prisoners.....	1,221,625.80
Prison division revenue.....	₱397,709.84
Industrial division revenue.....	198,071.33
	595,781.17
 Total net cost for 1929.....	625,844.63
Average net cost of maintenance of each prisoner for the year.....	89.07
Average net cost of maintenance of each prisoner for 1 day.....	.244

The foregoing table shows that the average net cost of each prisoner to the government during the fiscal year ending December 31, 1929, is ₱0.244 which is almost the same as that of the previous year.

The amounts allotted for freight, express, and delivery service (₱8,000), for postal, telegraph, telephone, and cable service (₱5,000), for consumption of supplies and materials (₱578,000), and for traveling expenses of persons not government employees (₱18,000), were inadequate to cover the expenditures in those items, and in order to fully provide for all expenses in those items an additional appropriation of ₱118,850 was requested, to be distributed as follows: ₱2,000 for freight, express, and delivery service; ₱250 for postal, telegraph, telephone, and cable service; ₱112,100 for consumption of supplies and materials; and ₱4,500 for traveling expenses of persons not government employees. But the total amount granted under section 7 of Act 3638 was only ₱116,100, of which ₱109,000 was to be applied for consumption of supplies and materials. This was not even sufficient to meet the expenses in that item.

The following table shows the total expenditures of the bureau of prisons from the year 1923 to 1929, inclusive:

Year	Prison division	Industrial division	Total	Year	Prison division	Industrial division	Total
1923	₱792,799.89	₱207,484.76	₱1,000,284.65	1927	₱960,417.86	₱216,633.29	₱1,176,051.15
1924	842,425.99	225,887.15	1,068,313.14	1928	962,410.46	226,882.04	1,189,292.50
1925	891,531.37	239,169.25	1,130,700.62	1929	1,006,925.03	214,700.77	1,221,625.80
1926	882,984.94	202,353.66	1,085,338.60				

The revenue of the bureau of prisons proper and the industrial division during the year 1929 is shown in the following table:

Prison division:

Bilibid prison	₱33,722.92
Iwahig penal colony	220,546.54
San Ramon penal farm	143,440.38

₱397,709.84

Industrial division:

Machine and vehicle repair shop	31,040.47
Wood furniture shop	32,292.80
Building, constructing and repairs	3,393.87
Wicker furniture shop	77,655.67
Tailor shop	46,998.19
Laundry shop	2,403.24
Embroidery shop	4,039.46
Sales section	217.63

198,071.33

Total revenue

595,781.17

The above total shows an increase over the corresponding total for 1928 by ₱37,793.69.

Maintenance and subsistence of prisoners.—The total cost of maintenance of the prisoners in Bilibid was ₱569,540.45; that of the prisoners in Iwahig penal colony was ₱280,052.15; that of the prisoners in San Ramon prison and penal farm was ₱154,417.97; and that of the prisoners in Fort Mills, Corregidor, was ₱41,854.69. Taking into consideration the total cost of maintenance of Bilibid, Iwahig, San Ramon, and Fort Mills stockade, Corregidor, as the basis, the daily average cost of maintenance was about ₱0.43 for each prisoner in Bilibid, about ₱0.44 for each prisoner in Iwahig penal colony, about ₱0.43 for each prisoner in San Ramon prison and penal farm, and about ₱0.18 for each prisoner in Fort Mills stockade, Corregidor. The following table shows the average cost of maintenance of the prisoners during the last two years:

Division	Maintenance	Average number of prisoners	1928		1929	
			Yearly	Daily	Yearly	Daily
Bilibid	₱569,540.45	3,669.75	130.09	0.3562	155.20	0.4251
Iwahig	280,052.15	1,750.00	164.70	0.4512	160.03	0.4384
San Ramon	154,417.97	985.00	169.40	0.4660	156.77	0.4295
Fort Mills Stockade, Corregidor	41,854.69	621.83	60.69	0.1936	67.31	0.1844

The foregoing table shows the average yearly and daily cost of maintenance of each prisoner confined in each of the insular penitentiaries, which includes subsistence, clothing, bedding, medicines, administration, etc.

The total amount of ₱686,542 was expended for consumption of supplies and materials, including subsistence of prisoners. This amount includes ₱468,-434.75 for subsistence of prisoners and ₱218,107.25 for consumption of supplies and materials such as office supplies, clothing, bedding, medicines, etc. In the Iwahig penal colony about 80 per cent of the subsistence supplies were produced by the colonists and in the San Ramon prison and penal farm about 70 per cent of the subsistence supplies consumed were farm products. The value of the subsistence supplies purchased and produced during the year ending December 31, 1929, is shown in the following table:

	Purchased	Produced	Total
Bilibid.....	₱246,814.02		₱246,814.02
Iwahig.....	126,433.52	₱208,172.97	334,606.49
San Ramon.....	56,932.76	142,273.01	199,205.77
Fort Mills stockade, Corregidor.....	38,254.45		38,254.45

The following is a comparative table showing the daily cost of subsistence per capita of prisoners confined in the various insular penitentiaries for the last six years:

	1924	1925	1926	1927	1928	1929
Bilibid.....	0.1785	0.1768	0.1935	0.1945	0.1558	0.1741
Iwahig.....	.1477	.1420	.1435	.1338	.1400	.1654
San Ramon.....	.1464	.2200	.1800	.1574	.1400	.1420
Fort Mills stockade, Corregidor.....					.1400	.1700

From the above table it would be seen that in 1929 the cost of subsistence of the prisoners confined in the three insular penitentiaries is higher than that in 1928, this rise being due to the corresponding rise in the prices of commodities. The two penal colonies shipped to the bureau of prisons farm products such as sugar, corn, etc., for the subsistence of prisoners confined in Bilibid and Corregidor, and this helped to prevent the further increase of the cost of subsistence of prisoners confined in Bilibid and Corregidor.

Industrial division of Bilibid prison.—The assistant director of prisons who, by law, is in charge of the activities of the industrial departments of the Bilibid prison, submits a very interesting report dwelling upon the problems confronting us in connection with our system of convict labor. According to him, it may be safely estimated that here in the Philippines about 65 per cent of our prisoners come from the rural or farming communities; about 20 per cent are from the common-labor variety class; and the rest are what we might classify as the educated group. In discussing the assignment that should be given to these prisoners, the assistant director of prisons says: "Those coming from the rural or farming communities can best be employed in our penal farms, where they can learn modern methods of agriculture; those of the common-labor class will also surely find interest in the farm, where they are away from the gangsters of the city that call and beckon them at every turn, trying their best to get them to do wrong, more so than otherwise, if they are known to have served time in Bilibid prison. Another signal advantage is the opportunity afforded to this class of prisoners to get accustomed to the simple farm life and get away from the so-called worldly pleasures in the city that force them to steal in order to secure them. For the intelligent group of prisoners, they should have some higher grade of industries under the supervision of men who are successful in their own business and who can command the respect of prisoners of this type."

In dealing with the activities of the various shops of the industrial division, his report calls attention to the fact that notwithstanding the efforts of the shop superintendents, the profits obtained were not as much as could, from a strictly business point of view, be desired. This was due to the fact that in the main, the prisoners employed in the shops were of the common-labor variety, unskilled, untrained, and ignorant, and for this reason much time was lost in training these

prisoners to a degree of skill and proficiency, as to become effective factors in profitable production. They necessarily have to waste considerable amount of materials during their apprenticeship. All materials in the government being strictly accounted for, the supplies wasted by the ignorant and unskilled convict during the time he is undergoing training, must be added to the column of "Losses." And yet the worst part of the tragedy must necessarily follow. The prisoner already trained to perform his task with efficiency and skill required by commercial standards, must be released on the expiration of his sentence or because he has been granted executive clemency. But this must necessarily be so since the function of our prison institution is not to conduct a commercial enterprise. As stated by the assistant director of prisons, "Its purpose is to educate and properly train those of wayward tendencies to become helpful and useful citizens. The element of profit and commercialization has no more room in this phase of governmental activity than it has in our police systems, our courts of justice, and our public educational institutions. All are instituted to render a public service, and are maintained through public funds. The element of private gain or commercialism is unjustified in any form."

Dwelling upon the subject extensively, the assistant director of prisons favors the adoption of the "State use system" now in vogue in many states of the Union, and the establishment of more penal farms where the prisoners, who mostly come from the rural communities, may be employed, as the best means for their reformation.

As regards ^{the} operation of the industrial shops, we quote the following from said report: ⁹⁹

"I will just limit myself to bringing to your attention the fact that almost a million pesos have been saved for the government in the appropriations for these shops for seven years (1923-1929) under the present administration as compared with the past administration for the same length of time (1916-1922). This saving has been made notwithstanding the fact that on many occasions, appropriations made for the industrial division have been utilized for the purchase of necessary equipment for the Iwahig penal colony and the San Ramon prison and penal farm.

Present administration		Past administration	
Year	Appropriation	Year	Appropriation
1923	₱313,791.82	1916	₱285,011.06
1924	305,935.80	1917	386,120.73
1925	295,365.59	1918	451,085.45
1926	295,240.00	1919	554,984.00
1927	297,240.00	1920	481,880.58
1928	246,240.00	1921	410,604.26
1929	243,610.00	1922	355,435.98
	1,997,423.21		2,925,122.06

Past administration.....	₱2,925,122.06
Present administration.....	1,997,423.21
Savings.....	926,698.85

NATIONAL LIBRARY

Personnel.—Since the death of the former director, Don Epifanio de los Santos, which occurred in April, 1928, the present assistant director, Mr. Eulogio B. Rodriguez, continued to act as director of the library until the appointment of the present director, Mr. Teodoro M. Kalaw, who assumed office on February 16, 1929. Aside from the appointment of the director, there were no important changes in the personnel of the library during the year except a few transfers and promotions.

Business transacted.—Applications numbering 5,535 for library privileges were received during the year, of which 3,860 were registered as new card-holders. Two thousand three hundred twenty-eight cards were surrendered. The average monthly circulation was 13,044 and the daily average was 522. The largest daily circulation was 1,018 on January 2, 1929, and the smallest was 122 on September 3, 1929. The total circulation is 156,525 as against last year's 137,562, representing a gain of 12 per cent.

During the year 1929 several improvements were introduced in the reading room, new shelves having been acquired and the tables rearranged. As a result of this the reading room of the general reference and periodical sections became more attractive and spacious than before and the readers were better served by the employees of those sections than in previous years.

In the library extension section a marked progress in the volume and quality of service was made by the provincial branch libraries. In general there was an increase in attendance in the number of reference books consulted, references made, books circulated, and in readers registered. There was particularly a big increase in the number of library patrons who read newspapers, magazines, and other periodicals, giving indications of the great interest of the people in the Provinces to keep themselves abreast with current events happening not only in this archipelago but also in other countries.

At the present time 11 provincial branch libraries, namely, in Iloilo, Cebu, Laoag, Zamboanga, Vigan, Naga, Baguio, Batangas, Lingayen, Tagbilaran, and Lucena, and two deposit stations in Daet and in the Philippine Columbian Club in Manila, were in operation during the year 1929. However, appropriations for five more branch libraries have been included in the 1929 law and proposed branches were intended for the Provinces of Cagayan, La Union, Nueva Ecija, Oriental Negros, Capiz, and Sulu.

The city of Manila passed an ordinance appropriating the sum of ₱15,000 for the establishment of three city branch libraries in the districts of Tondo, Sampaloc, and Paco. The money, however, was not available in 1929, but in the 1930 city budget approved on December 18, 1929, the same amount was included, so that the city branches will be established in 1930.

The total book circulation in all the branches was 115,635 as against 103,009 during the year 1928, or an increase of 12,526.

In the Filipiniana section of the library, books and manuscripts, some of them of great importance, have been acquired either by purchase or donation. Among those acquired by donation, we wish to mention the following:

1. The original papers filed by Lt. Sr. Luis Taviel de Andrade of the Spanish Army, counsel for the defense of Dr. Jose Rizal, on December 25, 1896, with the military court-martial appointed to try Dr. Jose Rizal, donated by its author through Hon. Sergio Osmeña; and
2. The possessory information deed of certain parcel of land owned by Dr. Jose Rizal in Dapitan. This last document was transferred from the register of deeds of Zamboanga to the national library by authority of the undersigned; and
3. Mrs. Gorgonia de Mapa, widow of the former chief justice of the supreme court has also donated to the library all the collections of her husband.

From August 26 to September 7, 1929, and upon the initiative of Mr. Teodoro M. Kalaw, director of the national library, an exhibition of all the most important relics of the rebellions during the Spanish times was held and was attended by thousands of visitors. This feature of the activities of the Filipiniana Division elicited very encouraging comments from the public and the press.

The output of the catalogue division during the year 1929 compares favorably with that of any previous year taking into account the various changes which greatly affected the cataloguing staff of the office. For the different collections of the library, there have been classified and catalogued 5,575 volumes besides the 411 books which have been indexed, catalogued and labelled for the copyright office. In addition to those there were 869 volumes which have been reclassified and recatalogued due to recent changes adopted with respect to the number of decimal points in their class numbers and to the form of entries in many cases. These figures together with the number of rebound books and also volumes whose labels have to be changed, give for the year a total of 10,052 books labelled and relabelled and otherwise prepared for the shelves.

Copyright.—The registration of copyrights numbers 271 at the end of the year. Of this number 167 were for books, 256 were for musical compositions, 4 for dramatic compositions, 23 for periodicals, 17 for motion pictures, 2 for designs, 1 for a reproduction of a work of art, 1 for a map and 2 for photographs. No drawing, lithograph, or photogravures were registered. Of the books registered 87 were written by Filipino authors, 19 written by Americans and Filipinos jointly and 1 by a foreigner. Of the motion pictures registered, nine were produced in the United States and eight were produced locally.

In accordance with the requirements of the law, two copies of each were deposited in the library, in cases where the books, musical compositions, dramatic compositions, and periodicals were printed. If not printed (in manuscript) only one copy was deposited. Of the books deposited, 304 were printed and 15 were

in manuscript. Of the musical compositions 206 were printed and 151 were in manuscript. The four dramatic compositions were all in manuscript.

The gross receipts during the year just ended amounted to ₱1,918.10, or more than three times as much as that of last year.

Legislative reference and bill drafting division.—The increase in research work and bill drafting service was also noteworthy. The number of research done was 51 or 9 more than that reported last year, not including inquiries that require a great deal of investigation. The number of bills drafted was 9,327 or 161 more than in the preceding years. Almost all of these bills were prepared at the request of individual members of the legislature.

General conditions.—The appropriation for books during the year just ended was ₱36,000 or ₱16,000 more than in the preceding year, besides the sum of about ₱8,000 donated by the different Provinces as financial aid to the library branches in the different Provinces. On account of this increase in the library appropriation a good number of new and up-to-date books were added to the library collections and a corresponding increase in the number of books in circulation, card holders and readers were registered during the year. In addition thereto, a large number of important books and pamphlets were added to the library collections through exchange of publications with foreign countries, and through deposits to the copyright office in conformity with the registration requirements.

With the appropriation of ₱30,000 given to the library for printing and publications, the preparation of the first volumes of a series of publication was undertaken. This first volume entitled "Epistolario Rizalino" which the library expects to bring out shortly, contains mostly the letters written to or by Dr. José Rizal.

In the Filipiniana division there are thousands of rare and important manuscripts, papers, and documents which have, up to this time, remained practically unknown to the public and which should be published in the interest of Philippine history. Very many of these manuscripts and papers are written in foreign languages and in the various Philippine dialects, and in order to prepare them for publication it will be necessary to employ the services of persons well-versed in the languages and dialects in which they have been written. In connection with this the Philippine legislature in its last session passed a bill appropriating the sum of ₱30,000 for the printing and publication of these manuscripts, papers, and documents, including the employment of the necessary personnel to undertake the work. But said bill was vetoed by the governor general on the ground that the appropriation called for in said bill is of such a nature that it should have been embodied in the budget and not in a separate act.

Library quarters.—Upon its transfer to the ground floor of the legislative building from its old quarters in Intramuros, the library was generally believed to have been already adequately housed and better accommodated than many of the bureaus of the government. The fact, however, is that not all of the divisions of the library have enough space in their present locations. The space problem of the archives division which is still located in Ayuntamiento Building has become a serious matter. Its present quarter embraces a floor space of more than one-third of the ground floor of the Ayuntamiento, yet its crowded condition is indeed very deplorable. The majority of the new documents and papers received during the last three or four years have been simply piled up on the floor, one on top of the other, leaving but little room for the employees to move around. Such condition does not only affect seriously the efficiency of the service but leaves those important papers and documents continuously at the mercy of destructive elements such as anay, rats, humidity, molds, etc.

Very respectfully,

JOSÉ A. SANTOS,
Secretary of Justice.

His Excellency the GOVERNOR GENERAL,
Malacanang.

ANNUAL REPORT OF THE SECRETARY OF AGRICULTURE AND NATURAL RESOURCES

DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES,
OFFICE OF THE SECRETARY,
Manila, March 15, 1930.

The GOVERNOR GENERAL OF THE PHILIPPINE ISLANDS,
Manila.

SIR: I have the honor to submit the following annual report of the department of agriculture and natural resources for the year 1929:

OFFICE OF THE SECRETARY

The undersigned having been designated as member of the special mission to look after the economic development and agricultural promotion of the Philippines in the United States, and to attend the hearings of congressional committees on the proposed revision of the tariff affecting the Archipelago, left the islands on March 16, 1929, and returned on December 9, of the same year. The result of the activities of the undersigned in connection with the said mission has already been reported to his excellency.

During the absence of the undersigned, the affairs of the department were intrusted to the care, direction, and management of Undersecretary Jorge B. Vargas, who signed as acting secretary by operation of law. During the same period, Mr. Angel S. Arguelles, then chief of the division of soils and fertilizers of our bureau of science, was designated as assistant to the secretary.

There were changes last year in the subordinate personnel of the office of the secretary, brought about by promotions, interbureau transfers, and special detail of technical men to assist and advise the secretary in matters affecting the department.

ORGANIZATION AND PERSONNEL

The organization of the department as a whole did not suffer any radical change during the year. However, plans were perfected for the purpose of reorganizing certain dependencies of the department so as to bring about a coordination of activities and greater efficiency in their operation. Such plans resulted in the enactment during the year of Act No. 3639 which has for its object the reorganization of our present bureau of agriculture by creating out of the same, two offices, namely, the bureau of plant industry and the bureau of animal industry. Inasmuch as the law had to become effective on January 1, 1930, steps toward carrying out the purposes thereof were well under way during the latter part of 1929. The intents and purposes of Act No. 3639 are mentioned under the heading of "Legislation" in this report.

The most important change in the personnel that took place during the year is the appointment on April 3, 1929, of Mr. Serafin P. Hilado, then performing the duties of auxiliary judge of first instance, to the position of director of lands. Before the appointment of Mr. Hilado, the bureau of lands continued to be under the immediate direction of Mr. José P. Dans as acting director of lands.

During the year, the policy of employing and keeping experienced Americans in the service for the purpose of training available Filipinos to gradually take over the technical activities of the Government was continued. Pursuant to that policy, all contract men were retained, including the directors of the bureaus of agriculture, forestry, and science.

The administration of agricultural colonies remained, as in previous years, in the hands of the bureau of lands and the bureau of non-Christian tribes. The latter bureau administered the colonies located in non-Christian Provinces.

AGRICULTURAL CONDITIONS

During the year 1928-29 under review, the country has witnessed several calamities worse than those suffered during the previous years by the farmers.

There was a long drought, by reason of which losses were sustained by the different crops, specially rice and corn. The rains came too late for the planting of rice and corn and the result was that the area planted to both cereals was reduced. A big destructive typhoon, with several others of ordinary force, leveled the unharvested rice and corn to the ground; bowed down thousands upon thousands of coconut trees and hills of abaca, and defoliated millions of them. The injury done to all crops particularly to coconuts, abaca, and sugarcane, by the typhoons and the floods and the force of winds of November, 1928, was enormous. It is estimated that the losses suffered were over ₱38,000,000. The losses sustained the year before from the same cause were estimated at ₱10,000,000.

There was an outbreak of plant pests and diseases, although less damage was caused by them during the year than in the preceding year, the losses during 1928-29 being 0.7 per cent of the aggregate area planted to rice, corn, coconut, abaca, sugarcane, tobacco, and maguey, as against 1 per cent during 1927-28.

Notwithstanding these adverse circumstances, however, the farmers generally succeeded in increasing the total acreage planted to sugarcane, coconut, abaca, cacao, coffee, and other plants, and obtained the highest yield per hectare for rice, sugarcane, and coconut.

Prices of important crops during the year were generally lower than those of the preceding year, specially of abaca, centrifugal sugar and copra, but there was slight advance for palay and corn, and a moderate gain for tobacco.

FOREST ADMINISTRATION AND CONSERVATION

In the administration and management of the public forests, this was a successful year which witnessed a marked progress particularly in connection with land classification, forest revenue, and lumbering.

During the year a total area of 1,202,069.76 hectares was certified to the director of lands which, if added to the area classified in previous years, would make a total of 10,574,233.12 hectares, or 35.7 per cent of the total land area of the Philippines (29,629,000 hectares). This segregation and delimitation work gives the bureau of forestry a good basis for confining its work in such areas as are temporarily or absolutely needed for forest reserves.

With respect to forest revenue, it may be stated that the collections during the year amounting to ₱1,997,059.92 showed an increase over the collections of the previous year amounting to ₱1,781,531.31, the difference being ₱215,528.61.

Likewise, there was considerable progress in lumbering. The amount of timber cut and manifested during the year was 1,658,568 cubic meters or an increase of 219,251 cubic meters over that of the previous year. Of this amount, the Filipinos manifested approximately 5 per cent, the Americans, 49 per cent and other nationalities 46 per cent. In the distribution and merchandising of lumber, however, the Chinese control the greater part of the local trade.

The estimated value of the lumber sold during the year including export and local trades, is about ₱75,000,000. The foreign trade of lumber in the Philippines was normal during the first five months of the year, but during the latter part of the year the export figures compared favorably with those of the same period of the previous year, notwithstanding the chaotic condition of the stock market in New York. The lumber exported during the year was 104,275,592 board feet, valued at ₱7,196,724 as compared with 85,897,736 board feet, valued at ₱6,258,904 during 1928, or an increase of over 21 per cent. The United States continued to lead in the volume of export, taking up 43 per cent of the total exportation, or 18 per cent of the total mill production, and Japan followed a close second while China was third.

The local markets showed an increase of demand over those of last year. Shipment and production continued to rise up to June, then dropped suddenly during August. This drop is probably due to the overstocking of the Manila market with low grade of lumber which could not be disposed of owing to lack of demand. In spite of this, however, the year just passed witnessed an increased shipment to local markets.

ADMINISTRATION OF MINERAL RESOURCES

Our records reveal that the mining claims located and staked out in 1929 are about three times those located and staked out in 1928. The claims in 1929 involved an area of approximately 5,927 hectares, of which 5,506 hectares refer

to lode claims and 421 hectares to placer-mining claims. This unprecedented activity in the location of mining claims may be ascribed to the discovery of a new mining region in the municipality of Angat, Province of Bulacan. This region is apparently rich in gold deposits.

As in previous years, the Benguet mineral district has been the center of mining activities. The Benguet Consolidated Mining Co. and Balatoc Mining Co. continued their program of extensive mining development. The former company alone exported about ₱2,882,588 worth of gold and silver bullion.

In order to give relief to mining locators and thus encourage the early development of our mineral resources, this office recommended last year to the legislature the passage of a law that would exempt the payment of wharfage charges collected on iron ores and other refractory ores. The legislature, however, was not able to act on it in its last session, but the undersigned intends to take up again the matter with our lawmakers at their next session.

ADMINISTRATION OF THE PUBLIC DOMAIN

The year 1929 has registered an increase in the total number of applications received for the acquisition of public lands, in comparison with that of previous years. Compiled figures reveal that for homesteads alone, the most popular way of acquiring public lands, a total of 13,903 applications involving an area of 236,615.6819 hectares were received during the year, as against 10,005 similar applications received in 1928 involving an area of 164,469.9641 hectares. This noted increase is indeed a healthy sign, as it shows a growing interest on the part of the Filipino people to acquire lands for themselves and their children and thus pave the way for a free and independent citizenry. In order to keep alive such interest, the land department had to redouble its activities in the matter of allowing entries and in issuing patents to entrymen who have fully complied with the requirements of the law. The activities along that line resulted in the approval in 1929 of 9,160 homestead applications with an area of 137,257.5165 hectares and of 2,203 free patent applications with an area of 10,375.5959 hectares and the issuance of 1,493 homestead patents involving an area of 17,699.8801 hectares and 393 free patents having an area of 1,656.3761 hectares.

In connection with its duty of disposing of the public lands, the land department was also called upon to decide the numerous claims and conflicts affecting the public domain that were brought to its attention. Two thousand two hundred and eighty-six decisions involving the rights of private claimants and public-land applicants were rendered in 1929 as against 1,033 decisions rendered in 1928. Some of these decisions were brought on appeal to the undersigned, and 59 such appeals were disposed of during the year. Although the early settlement of public-land controversies continued to be a problem for the land department in 1929 as in previous years, it may be happily stated that no serious agrarian controversy occurred during the year.

As stated in our report of last year, the greatest problem confronting the administration of the public domain is its disposition to the people within the shortest time possible, subject, however, to the bounds and limitations of the public land law. In order to solve this problem, the department proposed last year various plans to the legislature which showed a willingness to cooperate with the executive agencies of the government. As a result, we have been able to secure the enactment of Act No. 3607 which appropriated ₱75,000 for the appointment of 80 public-land inspectors, and the approval of house bill No. 2216 which is designed to promote and hasten the survey, subdivision, improvement, and disposition of the public domain and which has been sent to the United States for the approval of the President. Under the bill, the government will undertake the work of surveying and parceling out in convenient sizes certain regions in the sparsely inhabited portions of the Philippines, and then open them to entry under the public land act. It may, if circumstances warrant, delegate the work to private surveyors or corporations of private surveyors which may also undertake the work of improving the land so surveyed, delimited or subdivided, before placing it for sale or other disposition. The scheme is based on the real-estate subdivision principle, advantage being taken of the example offered by real-estate enterprises which have attained a high degree of success in the development of private lands. The land department pins much of its hopes for the early disposition of the public lands on the success of the operation of said measure.

In order to show further the growing importance of the problems confronting the administration of the public domain, your excellency created in 1929 a land title committee. This office hopes that the said committee which is still

functioning at this writing, will discover some solution to the vexing and complicated problems of land administration and registration.

In this connection, mention should also be made of the fact that Undersecretary Vargas, who performed the duties of acting secretary during my stay in the United States, appeared on October 14, 1929, before the legislature, upon official request, to enlighten the members of that august body on questions affecting large estate holdings of public lands. The voluntary appearance of Mr. Vargas before the legislature had the effect of paving the way for a mutual understanding between the executive and the legislative branches in the formulation of constructive and wholesome measures which are very necessary in the successful administration of the vast tracts of the public domain.

THE BUKIDNON PINEAPPLE RESERVATION

In line with the aim of the government to hasten the development of the public domain, as indicated above, efforts have been exerted to devise means calculated toward that end. It has been observed that one of the obstacles that stand in the way to accelerating the disposition of public lands is the lack of capital and organization.

It has been our plan to take advantage of the example offered by the highly organized sugar industry. The idea is to reserve for the establishment of an agricultural colony, under the provisions of section 83 of Act No. 2874, a large tract of land to be subdivided into lots of appropriate sizes, and to allow a corporation with sufficient capital to take up an area within the reservation subject of course to the limitations of the public land law, and to finance all public-land applicants desirous of raising a specified crop or crops on the other lots in the said reservation. To secure the payment of sums advanced by the financing corporation, the applicants are to be allowed to hypothecate in favor of the said corporation, their rights to the lands granted to them, but in case of foreclosure, the lands foreclosed must be transferred to other qualified public-land applicants within a term of five years; otherwise, the same will revert to the government. In order to insure a steady and sufficient supply of raw materials which the corporation may need, the public-land applicants are obligated to sell all their produce to the said corporation.

The first agricultural colony established along the scheme outlined above is the so-called Bukidnon pineapple reservation. The Philippine Packing Corporation has solicited and undertaken to be the financing corporation. During the past few years this company, jointly with our bureau of science, has been conducting experiments in the cultivation of pineapple with a view to its production on a large scale, and these experiments have demonstrated that the high plateau in the municipal districts of Libona and Sta. Fo, Province of Bukidnon, are very well adapted to the growing of such crop.

Accordingly, on April 22, 1929, Acting Governor General Gilmore, upon recommendation of this department, issued executive proclamation No. 230 reserving 14,052 hectares of public land in the municipal districts aforementioned, for the establishment of an agricultural colony. The subdivision survey of the land reserved has been completed and the Philippine Packing Corporation has already installed on the land expensive machinery and equipment needed in the industry. There have been received numerous inquiries from prospective applicants as well as applications for lots within the reservation, thus showing a great enthusiasm on the part of the people in the project which augurs well for the success of the experiment. However, the land department has not as yet started to entertain these applications, pending the promulgation of the rules and regulations governing the disposition of the said lots. These regulations, which would treat in detail the plan outlined above, will be ready for release within a few days.

IMPORTATION OF BEEF CATTLE AND DRAFT ANIMALS

As in the past few years, the ban against the importation of beef cattle was lifted in part during 1929, under the provisions of Act No. 3155, so as to permit the entry in the islands of a certain number of beef cattle to meet the demand for fresh beef in the city of Manila. For the protection of the local cattle industry from foreign competition, petitions were filed by the local cattlemen to stop the importation of beef cattle, alleging as ground for said petitions the presence in the country of cattle in sufficient number to supply the demand for fresh beef. But after a thorough study of the situation, and mindful of the interests of the consuming public which, in our opinion, should be given careful consideration, this department recommended to the Governor General the continuance of the

importation until the local cattle raisers could guarantee a sufficient and adequate supply of fresh beef in Manila at reasonable prices. Acting on this recommendation, the Governor General, with the concurrence of the presiding officers of both houses of the legislature, authorized the importation of such number of beef cattle as would be sufficient to supply fresh meat to a total of 1,800,000 kilos for the period from January 1, 1929, to December 31, 1929.

The importation of 5,000 work animals, together with the necessary complementary beef cattle to meet the need of the farmers, especially of the sugar planters, was also authorized under Act No. 3155. Out of this number, 1,158 head of carabaos and 175 head of complementary beef cattle were brought to the Philippines during 1929.

SCIENTIFIC ACTIVITIES

Scientific activities have been carried on in 1929 with as much intensity and have produced as much results as in previous years. These activities are of incalculable benefit and importance to the people and affect every phase of human activity in the Philippines.

To show what science has done to the people we may simply point to the fact that there was no prevalence of epidemic diseases in the islands in 1929. This is, in a great measure, due to the fact that the health of the public is protected against epidemic diseases by vaccines manufactured by our bureau of science. Eight million three hundred thousand doses of these vaccines were dispensed in 1929. Among the most important of these were vaccines against smallpox, cholera, typhoid, and dysentery. Our bureau of science also helps promote health conditions in the islands by examining different kinds of foods, especially imported canned goods, submitted by various importing and commercial concerns. During the year 1929 over 17,000 examinations were made on food substances and soft drinks. Over 9,000 bacteriologic and chemical examinations of water were made in 1929. During the year there were conducted nearly 100,000 examinations of feces, blood, sputum, and urine. For the protection of the public there were analyzed drugs and biologic products in connection with the enforcement of the pure food and drugs act.

Our bureau of science has assisted in the development of the mining industry by geologic survey work, investigating economic mineral deposits, assaying ore and bullion, testing ores for milling purposes, and examining mines and prospects for private parties. Soils and fertilizers have been examined for the benefit of the farmers. The farmers have also been given aid by the investigation made into the cause, prevention, and remedies of plant diseases. People interested in fisheries have consulted the bureau on their problems.

The researches conducted by the bureau of science have aided the development of industries in the Philippines and the promotion of sanitation and the advance of medicine. Such researches have resulted in the establishment of numerous industries and the improvement of a great many more, while the possibilities of still other industries have been pointed out. These include glass, paper, vitrified brick, medicinal remedies, paint oils including lumbang, and numerous others.

Our bureau of agriculture on its part continued to carry out its scientific work along agricultural lines. As in the previous years, field investigations and experimentation were conducted in the different experiment stations of the bureau, wherein rice, corn, sugarcane, tobacco, abaca, and other crops, as well as various fruit trees, vegetables, and root crops were subjected to variety test, acclimatization test, fertilizer test, cultural test, etc. Scientific investigation of plant pests and diseases, such as isolation of the causal organism of bud rot preliminary to morphological, cultural, and physiological studies of the organism and to inoculation work; studies of the nature and cause of wilt of sugarcane seedlings and the methods of controlling the disease; and experiments on abaca variety-resistance tests to heart-rot and bunchy-top diseases were also made. The veterinary research laboratory of the same bureau manufactured antirinderpest serum in big quantity, as well as hog-cholera virus, avian-pest virus, avian-pest vaccine, antiavian-pest serum, rabies vaccines, and several other biological products.

During the year our weather bureau has also made its contribution to science. The successful results of its observations on atmospheric electricity and sky polarization of the solar eclipse on May 9, 1929, are too well known as they have been given wide publicity in the press. The routine scientific activities of the bureau in giving typhoon warnings and in broadcasting time signals have saved a great number of lives and have proved beneficial to the economic development of the country.

THE PHILIPPINE RESEARCH INSTITUTE

The Philippine Research Institute is a corporation duly organized under the laws of the Philippine Islands, and incorporated on June 29, 1929. Its object, as embodied in its articles of incorporation, is "to conduct, encourage, promote, and foster scientific research in the Philippines." It is a purely private institution, but inasmuch as its working and operation are closely connected with our scientific work, we have deemed it advisable to make mention thereof in this report under a separate topic.

A majority of the officers of the institute are government officials, among whom may be mentioned Dr. William H. Brown, director of the bureau of science, as its president; Hon. Rafael Palma, president of the University of the Philippines, one of its vice presidents; and assistant director, A. S. Arguelles, of the bureau of science, its secretary. Among its directors are the Vice Governor General of the Philippine Islands, the undersecretary of the department of agriculture and natural resources, the president of the University of the Philippines, and the directors of the bureaus of science, forestry, agriculture, and coast and geodetic survey. Some of its contemplated activities are: To provide a central for purely research work in natural sciences in the Far East; to carry out scientific investigations in the fields of biology, chemistry, physics, geology, and other natural sciences; to advance the training of Filipino scientists in experimental methods; to utilize to the fullest extent existing institutions and contribute to their scientific development; and assist the Philippine government and the Government of the United States by research in problems related to the social, economic, and industrial welfare of the people of both Governments.

Realizing the importance and value of the noble and praiseworthy undertakings of the institute, which, if accomplished, would undoubtedly redound to the benefits of pure science, we have taken deep interest in its activities and agreed to furnish the institute with adequate laboratory and office spaces and facilities in the bureaus of this department, as well as grounds for experimental work and library and publication facilities. The corporation on its part has agreed to make regular reports to this department of the progress of all investigations conducted, and prepare statements on the results of such investigations for publication in the Philippine Journal of Science or other suitable papers.

MUSEUM WORK

The keeping and collection of museum specimens is a new activity placed under the supervision of this department. The museum collections used to be under the department of justice, through its Philippine library and museum, but upon the passage of Act No. 3477 the same were transferred to a newly created office, known as the national museum, which began to actually function on February 1, 1929.

The greater part of the collections of the museum were acquired by purchase and donation. Actually there are more than 10,000 ethnographical specimens which constitute the most extensive collection of its kind in the world. There are also interesting collections of historical objects, especially connected with the lives of famous Filipinos. The museum collections have been enriched during the year by further collection of museum specimens of archaeological value found in the different parts of the archipelago. The activities along this line resulted in the acquisition of rare specimens of porcelain and ceramic wares of Chinese origin brought to the Philippines during the early days.

ORDERS AND CIRCULARS

The functions and activities of the different bureaus and offices of the department are at present regulated by administrative orders, circulars, bulletins, special orders, travel orders, and office memoranda. Certain rules governing the preparation of such orders and circulars have been prescribed by this office and promulgated in department circular No. 1, dated June 12, 1929, for the purpose of attaining uniformity and making said orders and circulars more readily accessible to the officers and employees concerned as well as to the public in general. As a result, each bureau of the department issued its own orders, circulars, memoranda, etc., along prescribed forms, of which the most deserving of mention is the administrative order No. 1 of each office embodying, as it does, among other things, a statement or description of the bureau's organization and operation, defining and outlining its different functions and activities to carry out the purposes of its creation under the law.

LEGISLATION

The year 1929 witnessed the passage of several important and wholesome acts affecting the department of agriculture and natural resources. The law that deserves special mention is Act No. 3639 which created, out of the former bureau of agriculture two offices, namely, the bureau of plant industry and the bureau of animal industry. This law is intended to bring about greater efficiency by separating two major activities of the government, namely, the development of the purely agricultural resources and the promotion of the livestock industry, and placing same under two distinct yet coordinate offices to be administered and supervised by officials who are specialists in their own lines. The successful operation of this law is supplemented by the passage of two other laws—Act No. 3632, which aims to extend the operation of stock herds and farms to breeding stations and slaughterhouses, and Act No. 3624, which is designed to extend the operation of seed farms to experiment stations.

Mention herein should also be made of the bills affecting the department which have already been approved by both houses of the legislature and by the Governor General but were sent to the President of the United States for approval. The most important of these bills, which total four in number, is house bill No. 2216, which aims to promote and hasten the survey, subdivision, improvement, and disposition of public lands in the Philippines.

A list of the laws passed by the eighth Philippine Legislature, 1929, second session, affecting the different offices of the department of agriculture and natural resources follows:

LANDS

Act No. 3673 (house bill No. 2216): An act to promote and hasten the survey, subdivision, improvement, and disposition of public lands in the Philippine Islands, and for other purposes. (Sent to the President of the United States for approval.)

Act No. 3607: An act appropriating the sum of ₱75,000 for additional public land inspectors to expedite the inspection work of the bureau of lands, and for other purposes.

Act No. 3540: An act creating a committee to study the ways and means of promoting the development of Mindanao and Sulu and other especially organized Provinces, and defining its duties and powers, and for other purposes.

Act No. 3608: An act endowing the University of the Philippines with portions of lands of the public domain for additional support and maintenance, and for other purposes.

Act No. 3626: An act to regulate the practice of surveying, create a board of examiners for surveyors, define its powers and duties, and appropriate funds for this purpose.

Act No. 3621: An act to amend sections 34, 37, 38, and 39 of Act No. 496, known as the land registration act.

Act No. 3630: An act to amend section 38 of Act No. 496 of the Philippine Commission, entitled the land registration act, and for other purposes.

Act No. 3672 (house bill No. 1992): An act to authorize the filing in the proper court, under certain conditions, of certain claims of title to parcels of land that have been declared public land, within the period of one year from the date of the promulgation of this act. (Sent to the President of the United States for his approval.)

Act No. 3554: An act ceding to the provincial government of Romblon the concrete storehouse constructed in the municipality of Romblon for coal barn by the insular government.

FORESTS

Act No. 3674 (senate bill No. 184): An act to limit the granting of licenses for the cutting of timber and the utilization of other forest products to Philippine and American citizens, and for other purposes. (Sent to the President of the United States for approval.)

Act No. 3572: An act to prohibit the cutting of Tindale, Akle, or Molave trees, under certain conditions, and to penalize violations thereof.

Act No. 3577: An act to amend section 1840 of Act No. 2711, known as the administrative code, as amended by Acts Nos. 2902 and 3225, by extending the time during which lower-group timber may be taken without license for another term of five years.

Act No. 3604: An act to punish the theft of shoots, leaves, fruits, or trunks of the Buri tree and the destruction thereof, and establish the penalties to be imposed in each case.

ANIMAL INDUSTRY

Act No. 3639: An act creating the bureau of animal industry; defining its powers and functions; providing for its personnel; making appropriations for its organization and operation; changing the name of the bureau of agriculture to bureau of plant industry; and for other purposes.

Act No. 3671 (house bill No. 2700): An act to promote and protect the livestock industry of the Philippine Islands, amending certain paragraphs of the act of Congress approved August 5, 1909, entitled "An act to raise revenue for the Philippine Islands and for other purposes," by increasing the duty on live bovine animals. (Sent to the President of the United States for approval.)

Act No. 3632: An act to amend sections 1, 2, and 3 of Act No. 2758, entitled "An act providing for the establishment of stock herds and farms for the same, appropriates funds therefor, and for other purposes," so as to extend its operation to breeding stations and slaughterhouses, provide additional funds therefor, and for other purposes.

Act No. 3584: An act to amend section 533 of Act No. 2711, known as the administrative code.

Act No. 3576: An act to amend sections 538, 539, and 540 of Act No. 2711, known as the revised administrative code, and for other purposes.

AGRICULTURAL CROPS

Act No. 3639: Creating the bureau of plant industry. (Same law that created the bureau of animal industry.)

Act No. 3624: An act to amend section 104 of Act No. 3443, entitled "An act to appropriate the sum of ₱50,000 for the establishment, equipment, maintenance, and operation of seed farms for rice, corn, sugarcane, and other staple crops under the bureau of agriculture, and for other purposes," so as to extend its operation to experiment stations, provide additional funds therefor, and for other purposes.

Act No. 3594: An act further to amend sections 2 and 5 of Act No. 2818, as amended by Act No. 3039.

Act No. 3571: An act to stimulate and encourage the intelligent and profitable merchandising of agricultural products, and for other purposes.

Act No. 3625: An act to appropriate the sum of ₱20,000 for the promotion, organization, and supervision of cooperative marketing associations among producers of agricultural products in the Philippines by the bureau of commerce and industry, and for other purposes.

Joint Resolution No. 4: Joint resolution creating the Rural Bank Commission for the investigation of the credit needs of the rural communities and to devise ways and means of fostering agricultural industrial expansion.

STANDARDS

Act No. 3595: An act to regulate the manufacture, importation, and sale of galvanized iron, barbed wire, and nails, and for other purposes.

Act No. 3596: An act to prevent the adulteration of, and deception in the sale of paints and paint materials in the Philippine Islands.

MISCELLANEOUS

Act No. 3638: An act appropriating funds for the necessary expenses of the government of the Philippine Islands during the fiscal year ending December 31, 1930, and for other purposes.

Act No. 3670: An act making appropriations for public works.

Act No. 3535: An act to amend section 79 (c) of act No. 2711, known as the administrative code, as amended. (Re direction and supervision of department head.)

Act No. 3599: An act to amend section 287 of act No. 2711, known as the administrative code. (Re employees' leave abroad.)

Act No. 3569: An act to provide for a check and audit by the bureau of audits, from time to time, of all property of the insular government and of the provincial and municipal governments, and appropriate funds for said purpose.

Act No. 3597: An act authorizing the construction of insular government buildings, and the alteration and improvement of the official residences of the Governor General in the cities of Manila and Baguio, providing funds therefor and for other purposes.

Act No. 3598: An act to provide that the functions of sheriff be exercised ex officio by the clerk of the court of first instance in the city of Manila and in the

several Provinces by provincial sheriffs, amending for that purpose sections 183, 184, 186, 187, 188, 189, and 191 of the administrative code of the Philippine Islands, and appropriating the necessary amount for the salaries of provincial sheriffs and their deputies, and for other purposes.

BUREAU OF AGRICULTURE

GENERAL SURVEY OF PRINCIPAL CROPS

Palay (rough rice).—The planting of palay was hindered in many regions because of the lateness of the rainy season. This, coupled with the low prices that prevailed in the past three years, which disappointed not a few planters, caused the decrease of the area planted in 1928-29 by 1 per cent of the area planted in 1927-28. The total area planted during 1928-29 was 1,775,400 hectares, as against 1,786,960 hectares in 1927-28 and 1,807,060 hectares in 1926-27.

Due partly to this decrease in area, and partly to the typhoons and floods, the yield for the year under consideration has slightly decreased. The total production for 1928-29 amounted to 49,786,400 cavans of 44 kilos as against 49,921,200 cavans for 1927-28 and 49,946,400 cavans for 1926-27.

The following table gives the total area planted to rice, the total production, the average yield per hectare, the average price per cavan, and the total value for the years 1926-1929, inclusive:

Years	Area cultivated (hectares)	Production (cavans)	Average yield per hectare	Average price per—		Total value
				Cavan	Kilo	
1926.....	1,755,920	47,780,000	27.21	₱4.27	₱0.10	₱204,051,110
1927.....	1,807,060	49,946,400	27.64	4.02	.09	200,970,720
1928.....	1,786,960	49,921,200	27.94	3.67	.08	183,295,130
1929.....	1,775,400	49,786,400	28.00	3.88	.09	193,431,510

Coconuts.—There was a considerable increase in the number of coconut trees planted in the entire archipelago during last year. At the end of 1928-29 season, there were 101,527,030 coconut trees planted, of which 65,082,800 were bearing nuts and 574,770 were distilling tuba. These figures represent an increase of 3 per cent in the number of coconut trees planted, 6 per cent in the number of bearing trees, and 10 per cent in the number of tuba trees, over the corresponding figures of the preceding year.

The total number of nuts gathered in 1928-29 has reached 2,155,530,000, the biggest number ever produced in the islands, as against 1,906,804,000 in 1927-28, while the production of tuba was 115,847,330 and 113,694,610 liters, respectively. A little over one-tenth of the coconut production, or 235,411,000 nuts, were used in the desiccated coconut industry and for food purposes and the remainder were turned into copra and coconut oil. The production of copra during the year was the largest ever registered, being 7,591,960 piculs of 63.25 kilos each, or 11 per cent more than the amount produced in 1927-28. The oil obtained from the coconut decreased from 1,933,580 liters in 1927-28 to 1,639,630 liters in 1928-29.

Municipal market prices were generally lower in 1928-29 than the year before, excepting those for tuba. The average price of copra was ₱8.89 per picul; that for 100 coconuts, ₱3.51; for coconut oil, ₱0.37 per liter; and for tuba, ₱0.11 per liter. The corresponding prices for 1927-28 were ₱10, ₱3.85, ₱0.41, and ₱0.09, respectively. At these rates, the aggregate value of all coconut products was ₱89,093,620 in 1928-29, as against ₱85,408,430 in 1927-28.

Sugarcane.—The area planted to sugarcane during the year was 257,710 hectares, or an increase of 9 per cent over the area planted the year before. The yield was 13,395,700 piculs, of 63.25 kilos each, of sugar and panochas, which represents an increase of nearly 16 per cent over the figures of 1927-28. This extraordinary increase is the result of the establishment of a number of additional sugar centrals in the islands, as it has been observed that such increase was registered in those provinces where centrals are located, especially in the Province of Tarlac, where the biggest central in the world was erected last year. In said province alone, over half a million piculs more than the yield obtained in the preceding year was produced. Pampanga was second in production with an increase of nearly half a million piculs; Occidental Negros followed with an increase of nearly 400,000 piculs; and Laguna came next with an increase of a

little over 200,000 piculs. Only Oriental Negros, Cebu, and Ilocos Sur recorded decreases due to unfavorable weather. The average yield per hectare for the entire islands was 51.9 piculs in 1928-29, as against 48.9 piculs in 1927-28. It is estimated that 11,035,410 piculs of centrifugal sugar, 1,744,620 piculs of muscovados, and 615,670 piculs of panochas were produced. The aggregate value of all sugar cane products was ₱119,915,120 and that for the preceding year ₱114,136,710.

There were also increases recorded in the production of basi and molasses. The total produce of basi during the year was 6,135,900 liters and that of molasses 20,459,490 liters, as against 5,440,250, and 11,203,010 liters, respectively, during the preceding year. Prices for basi advanced from ₱0.15 a liter in 1927-28 to ₱0.22 in 1928-29, but prices for sugar fell from ₱9.77, the price quoted the year before, to ₱8.74 per picul; those for panochas fell also to ₱7.91 per picul this year from ₱8 in 1927-28; and molasses were sold this year at ₱0.09 per liter or ₱0.02 less than the price during the previous year.

Abaca.—This premier fiber registered this year a record crop, partly because of the ever-increasing activity of the abaca planters, especially in the Province of Davao, and partly because of the great need of money by the planters in those provinces where the typhoon of November, 1928, caused serious damages both to the plantations and homes of the farmers. Until recently, Davao Province occupied the sixth place among the abaca-producing provinces with respect to the area planted to said plant, and occupied the third place in the order of production. This year, however, it advanced to fourth place in area planted and now leads all other Provinces in production.

At the end of the year under review there were planted to abaca 484,850 hectares, of which 403,130 were productive and yielded 3,373,810 piculs of 63.25 kilos each of fiber. The corresponding figures for the preceding year were 480,730 hectares, 394,910 hectares, and 2,826,340 piculs.

Due to the extraordinary production and the planters' dire need of money in the regions hit by the typhoon, the prices of abaca in 1928-29 were considerably lower than those for 1927-28, the average being ₱16.24 and ₱19.23 per picul, respectively. The value of the total crop was ₱54,814,360 as against ₱54,362,440 of the preceding year.

Corn.—Weather conditions were unfavorable for the growing of corn during the year, so that the production suffered a reduction of 16 per cent as compared with that for the year before.

There were 515,040 hectares planted to this grain which yielded an average of 11.92 cavans of 58.5 kilos each of shelled corn per hectare, or a total crop of 6,141,690 cavans. During the previous year, the area under cultivation was 519,680 hectares yielding 7,342,300 cavans, at the rate of 14.13 cavans per hectare.

Due to the shortage of production there was an advance in the price of corn in the municipal markets by about 43 centavos per cavan over the average price of last year. The total crop for 1928-29 was sold for ₱24,431,600 as against ₱26,104,700, the price at which the crop for 1927-28 was disposed of.

Tobacco.—The handicaps encountered by the tobacco planters during the year were greater than those faced during the previous year due to bad-weather conditions. However, because of the increase of the area of the tobacco plantations and of the good care given to them by the planters, the production during the year excelled that of the previous year both in quantity and in quality. The total area planted during the year was 82,620 hectares, or 3 per cent more than for 1927-28 season, and yielded 1,030,840 quintals of tobacco leaves of 46 kilos each, or an excess by 3 per cent over the production of the previous year. The average yield per hectare for both years was the same, 12.47 quintals. The prices offered during the year advanced somewhat over those for 1927-28; ₱10.15 per quintal as against ₱9.30 the preceding year. At these rates the crops for 1928-29, and 1927-28 were valued at ₱10,463,050 and ₱9,334,770, respectively.

Maguey.—At the close of the year 1928-29 there were 37,260 hectares planted to this fiber as against 35,630 hectares in the preceding year, or an increase of 5 per cent. About four-fifths of said area was in the state of production, yielding 386,470 piculs of maguey of 63.25 kilos each, or an increase of 9 per cent, as compared with the production of the year before, which amounted to 308,580 piculs.

The crop of 1928-29 was sold in the municipal markets for ₱3,538,030, at the rate of ₱10.52 per picul, as against ₱3,288,130, the value of the preceding crop.

Cacao and coffee.—The ever-increasing demand for cacao and coffee has given and is giving great incentive to the planting of these plants. At the end of the year under consideration there were 2,321,000 cacao trees and 2,993,700 coffee

trees planted in the islands, as against 2,156,800 and 2,842,700 trees under cultivation the preceding year. About half of the trees planted are bearing, the production being 1,215,800 kilos of cacao and 1,301,400 kilos of coffee. The respective yields of these plants for the year 1927-28 were 1,172,900 and 1,236,600 kilos. The average price per kilo of cacao was ₱1.02 and that of coffee, ₱0.71. The total value of cacao produced was ₱1,239,200 and that of coffee ₱926,300, as against ₱1,183,700 and ₱868,600, respectively, in the previous year.

LIVESTOCK

Inasmuch as it has not been possible to gather all the necessary data for 1929 within the short period elapsing between the end of the year and the date fixed for presenting this report, the figures given for animals are, as usual, one year late.

Conditions during the year 1928 were generally favorable for the raising of large cattle. There were registered increases in the number of carabaos, horses, and cattle over the figures of the year 1927. These increases were 3.68 per cent for carabaos, 6.29 per cent for horses, and 4.08 per cent for cattle, as against 3.47, 2.74, and 4.73 per cent, respectively, in the previous year. The rates of birth were 14.49 per cent for carabaos, 15.63 per cent for horses, and 18.57 per cent for cattle, as against 14.33, 14.71, and 18.19 per cent, respectively, for 1927. The rates of mortality were 1.35 per cent for carabaos, 2.52 per cent for horses, and 2.08 per cent for cattle, as against 1.35, 2.97, and 1.88 per cent, respectively, for 1927.

During 1928 there were slaughtered 53,485 head of carabaos, 5,909 head of horses, and 134,538 head of cattle. The corresponding figures for 1927 were 50,880, 4,193, and 136,389. The average weight of the native cattle slaughtered in 1928 was 122 kilos per head, or 10 kilos more than the average weight recorded in 1927.

PERSONNEL

At the beginning of the year there were 550 employees in the roll of the bureau. There were appointed 158 employees and 97 separated from the service, leaving 611 on December 31, 1929, or 61 more than the preceding fiscal year. This was due to the increased activities of the bureau, especially in the campaigns for the control of animal and plant pests and diseases.

FIXED ASSETS

The fixed assets of the bureau for 1929 amounted to ₱1,381,440.72, while those for 1928 amounted to ₱1,387,086.85, or a decrease of ₱5,641.13.

DIVISION OF PLANT INVESTIGATIONS

Horticulture projects.—Some progress was made on the variety, breeding, selection, and stock tests of various fruit trees. The rejuvenation of the old and unproductive Batangas mandarin-orange trees by cover cropping was found fruitful. Cover crops influenced more or less the maturity of the fruits. The Liberian and the Excelsa coffee continued to give very satisfactory results, yielding from 363 to 473 kilos per hectare under the soil and climate conditions prevailing in Lamao experiment station. Further vegetative propagation of some tropical fruit trees were continued and satisfactory results were obtained. Varietal selection tests were also conducted on root crops and vegetables.

Experimental tapping of Para rubber together with the strain tests were continued as usual and the results were in general similar to those obtained during previous years.

Agronomy projects.—Variety tests were made on rice, corn, sugarcane, and tobacco and the results are briefly summarized as follows:

Of the dry season rice variety test, Sipot, and Guinangang (strain No. 1) yielded 55 and 51.9 cavans, respectively, per hectare. In a pedigree work, Macan Culi-culi strains Nos. 14 and 19 were the most productive and Elon-elon strains Nos. 2, 5, and 7 appeared the best. In a fertilizer experiment using fertilizer containing from 25 to 30 per cent phosphoric acid soluble in ammoniacal citrate and from 35 to 40 per cent active lime applying 133 kilos to the hectare, an increase of 11.6 cavans was obtained over the control average yield of 57 cavans per hectare.

In corn variety test of 27 varieties, the highest yielders were Calamba Yellow, Moro White, and Purple Flint, producing an average yield of 20.64, 18.64, and 16.49 cavans shelled corn per hectare, respectively.

Of 14 varieties of sugarcane (first ratoon), the Louisiana Stripped produced 101.75 piculs of sugar per hectare; Hawaii, 109, 101 piculs; Java, 247, 99.21 piculs; Badila, 97.17 piculs; and New Guinea, 24-A, 96.30 piculs. In the germinating test, using stalks of New Guinea, 24-A, 6 months and 22 days old, each piece cut into 4 sections having 3 eye buds; the apical cuttings gave 90.8 per cent germination; the second cuttings, 83.5 per cent; the middle cuttings, 66 per cent; and the base cuttings, 54.7 per cent.

In the tobacco wrapper variety test, 43 (8293) Philippine Sumatra yielding 38 per cent wrapper by weight; 52 (9731) Vizcaya, 33 per cent; and 18 (8714) Philippine-Florida Sumatra, 25 per cent. In the cigarette variety test, 52 (8731) Vizcaya produced 1230 kilos of leaf tobacco per hectare, 29 (9726) Orinoko, 839.28 kilos, and 15 (8741) Romero, 658.92 kilos.

Fiber projects.—Abaca, maguey, sisal, kapok, cotton, panama-hat palm, and miscellaneous fiber crops were experimented with. Forty-five different investigational jobs were carried on simultaneously at the Guinobatan abaca experiment station and at the Lamac experiment station on fiber crops. These embrace selections of varieties, irrigation, cover-cropping, green manuring, shading, application of fertilizers, rejuvenation of plantations, breeding for desirable types and stripping. Of the 11 varieties under test the abaca variety Lausigon in the third-year crop produced the greatest yield of 651.08 kilos of fiber per hectare with a tensile strength of 52,526 grams per gram meter.

Calcium phosphate, containing 26 per cent P_2O_5 , applied at the rate of 50 kilos per hectare was the best single fertilizer tested for old abaca plantations under Guinobatan conditions, while an application to an old plantation of 570 kilos of a fertilizer mixture containing 16.45 per cent N and 20 per cent P_2O_5 per hectare gave a yield of 916.7 per cent kilos of fiber per hectare.

During the year thousands of abaca hybrid seedlings were raised from 13 different crosses.

Miscellaneous projects.—Good varieties of sugarcane, rice, fruit trees, forage grasses, etc., selected through experiments, were distributed for cooperative trial planting to the farmers all over the archipelago, and the reports on these crops indicate that in the majority of cases they gave better yields than local cultivated varieties. Seeds and plant materials with an estimated value of ₱33,344.92 were raised for free distribution, for cooperative trial planting, for foreign exchange, and for sale.

AGRICULTURAL EXTENSION DIVISION

General activities.—Aside from the food production and rehabilitation campaign carried out, in cooperation with local officials and the Red Cross, in the typhoon-stricken and flood-ridden areas, the principal activities undertaken by this division during the year were the extension of the area planted to fruit trees, selection and distribution of seeds, seedlings, and other plant materials, and propagation of different kinds and varieties of plants.

Fruit-tree propagation.—There were 439,532 fruit trees planted during the year in places where the agents from this division have been assigned. The fruit trees propagated in the nurseries by fruit growers were as follows: Coffee, 225,634; kapok, 12,200; mango, 1,755; citrus (g), 150; citrus (s), 15,557; avocado, 15; coconut, 27,020; lanzon, 5,034; nangga, 540; cacao, 36,055; rimas, 380; papaya, 970; other trees, 6,705. These plants are being planted as fast as ready.

In the districts covered by the agents and nurseries, there were grafted 1,680 citrus, 4,075 budded citrus, and 610 other plants. Other grafted plants were 6,693 mango, 324 lanzones, and 890 other plants; macotted 433 chicos, 231 citrus, 24 lanzones, and 285 other plants; pruned 6,658 coffee, 3,214 citrus, 1,921 cacao, and 12,221 other fruit trees.

Distribution of seeds and plant materials.—The distribution of seeds and other plant materials was made through the central office and at the three insular nurseries in Singalang, Manila; Lipa, Batangas; and La Paz, Iloilo. The total value of the seed and plant materials distributed was ₱37,996.90, besides ₱8,198.47 worth of materials furnished free to typhoon and flood sufferers by the Red Cross.

Seed farms.—During the year the work of establishing seed farms under acts Nos. 3443 and 3527, was started. The idea is to create seed-distributing centers where good seeds of desirable varieties of crops can be produced and made available to the farmers. It was planned to establish the farms in storm-stricken agricultural areas where seeds can be obtained in time of emergency, particularly after the occurrence of a devastating storm. A part of the project is to develop the seed farms into permanent units of agricultural experiment station, where studies can be made of local problems of farming.

PLANT PEST CONTROL DIVISION

Locust.—Through systematic campaign and general scouting work, the invasion of locusts had been suppressed, no infestations having been reported beginning the month of August up to the close of the year. The comparative data of infestation for the years 1928 and 1929 are as follows:

	1928	1929
Provinces infested.....	13	9
Provinces freed.....	8	9
Provinces still infested at the close of the year.....	5	0
Municipalities infested.....	167	60
Municipalities freed.....	158	60
Municipalities still infested at the close of the year.....	9	0

Coconut pests.—Shortly before the locust infestation had been placed under control, there broke out in the Province of Laguna about the month of August, 1929, a destructive coconut pest known as the leaf miners, *Promecotheca cumingi Baly*, which spread within a very short period of time to the Provinces of Batangas and Tayabas. In view of the alarming situation of the infestation, the field force of the division in said Provinces, together with other personnel thereof, as well as the field men of the agricultural extension division, the provincial and municipal officials concerned, and the planters themselves had to exert all the necessary efforts for the extermination of that worse enemy of the coconut industry.

Aside from the leaf miners, there were also other pests which caused much damage to coconut trees, among which are the bud rot, the stem-bleeding disease, and the black and red beetles.

Sugarcane grubs.—As the bureau was busy conducting the campaign against leaf miners and other coconut diseases in the coconut-producing Provinces, reports were received from Negros about October, 1929, to the effect that the sugarcane grubs, *Leucophelis irrorata*, were causing much damage to the sugarcane plantations in that region. Available personnel had to be sent to the infested area to make an investigation of the situation and advise the people of the best control measures to be followed.

RURAL CREDIT DIVISION

To have an effective and an efficient administration of the rural credit cooperative associations, the whole archipelago was divided into 11 districts. To each of these districts has been assigned a resident agent whose duty is to inspect the associations within his district at least two or three times a year, except district No. 11, composed of the Provinces of Palawan, Zamboanga, Lanao, Cotabato, Davao, and Sulu, which has no resident agent because of lack of personnel. However, the associations in those Provinces are visited at least once a year by a man from the central office.

The division has continued its policy of encouraging the associations to establish a central bank in each Province.

During the year 1929 new associations were organized in four municipalities, and no association was dissolved.

Majority of the long overdue loans were recovered during the year 1929. Court action, however, had to be resorted to against some delinquent borrowers, who, without reasonable excuse, failed to settle their long-standing accounts when asked to do so. However, many of them paid what they owed to avoid court action.

ANIMAL INDUSTRY DIVISION

Importation, interisland shipments, and slaughter of animals.—During the year there arrived at the port of Manila, 8,609 head of cattle from Australia and 1,087 head from Pnom Penh, French Indo-China, and at Iloilo, 1,158 head of carabaos and 175 head of cattle from French Indo-China. There were landed at Manila from interisland ports 19,183 head of cattle and 3,321 head of carabaos, which are in excess of 2,700 head of cattle and 676 head of carabaos over those brought to the city during the preceding year. A total of 174,635 animals of all kinds were inspected upon arrival at Manila, for which fees amounting to ₱22,603.10 were charged and collected. Of these animals, 139,897 were swine. During

the year 699 Pnom Penh cattle were slaughtered at the Pandacan matadero, of which 5 were condemned and 694 passed for food. At the Azcarraga matadero, there were inspected 154,477 animals, of which 152,553 were passed for food, and 1,924 condemned. The number inspected includes 133,011 swine. At the Sisman matadero, 8,378 Australian cattle were slaughtered of which 56 were condemned, and 8,322 passed for food.

Animal diseases.—During the year 4,059 cases of rinderpest were reported with 3,105 deaths, or an increase of 409 cases and 413 deaths over those of the previous year. The Provinces in which the disease was present during some parts of the year were Antique, Cagayan, Iloilo, Isabela, Mountain Province, Nueva Ecija, Nueva Vizcaya, Occidental Negros, Oriental Negros, and Tarlac.

Sporadic cases of anthrax were reported from Bataan, Bulacan, Cavite, Laguna, Mountain Province, Nueva Ecija, Pampanga, Pangasinan, Rizal, and Tarlac. The number of cases and deaths were:

	Cases	Deaths
Carabaos.....	468	431
Cattle.....	36	36
Horses.....	2	2
Total.....	506	469

These figures compared with the cases and deaths registered during the previous year show an increase of 193 cases and 182 deaths. A total of 64,173 head of carabaos and cattle were injected with anthrax vaccine and antianthrax serum as against 62,480 carabaos and cattle injected the preceding year.

Outbreaks of hemorrhagic septicemia occurred during the year in Abra, Bohol Laguna, Leyte, Mindore, Misamis, Mountain Province, Occidental Negros, Pangasinan, Samar, and Sorsogon, with a total number of 577 cases and 545 deaths. The cases and deaths recorded the preceding year were 404 and 341, respectively. Leyte and Sorsogon were the provinces that suffered most from this malady, with 169 cases and 168 deaths, and 115 cases and 96 deaths, respectively. A total of 7,652 animals—7,268 carabaos, 242 cattle, and 142 hogs were given hemorrhagic septicemia aggressin.

Other animal diseases which claimed many lives of our large cattle are surra, with 419 cases and 399 deaths; foot-and-mouth disease, with 496 cases and 102 deaths; glanders with 1 case and 1 death; and bovine contagious pleuropneumonia, which affected imported cattle from Australia.

Manufacture of serums and vaccines.—The total number of animals used for the manufacture of vaccines was 1,341 costing ₱89,382.50, or an average cost per head of ₱66.52. As the revenue derived from sales amounted to ₱5,710.80, the net cost to the government was ₱83,671.70. During the year 1,330,620 cubic centimeters (445,540 cattle doses) of vaccine was manufactured, and the amount on hand on December 31, 1928, was 40,317 cubic centimeters, making a total of 1,370,937 cubic centimeters, of which 1,342,601 cubic centimeters, or 447,533 cattle doses were used in the campaign against rinderpest, leaving a balance on hand on December 31, 1929, of 28,336 cubic centimeters, equivalent to 9,445 cattle doses.

The manufacture of hog cholera virus was continued. A total of 5,200 cubic centimeters was produced, and 1,598 cubic centimeters disposed of during the year. During the same year, there were also prepared approximately 1,000 cubic centimeters of liquid avian pest virus and 20 grams of dried organs; 800 cubic centimeters of avian pest vaccine; 190 cubic centimeters of antiavian pest serum; 20 grams of street virus; 850 cubic centimeters of rabies vaccine by the penol-killed method; 50 cubic centimeters of positive horses serum obtained from a horse suffering from experimental surra; and other biological products used for the treatment of animals.

Animal husbandry section.—The work on animal breeding received much attention. In the stock farms and breeding stations of the bureau, a number of animals of pure or improved breed were raised and sold or loaned to the stock raisers.

DIVISION OF PUBLICATIONS

There were published 1 annual report, 4 issues of the Philippine Agricultural Review, 4 issues of the "Ang Magsasakang Pilipino," 8 new circulars, 8 old ones, 1 Miscellaneous Agricultural Information, 4 miscellaneous publications, 6

posters and 12 articles for the local papers. Of these publications 148,823 were distributed during the year as against 205,312 in 1928, or a decrease of 56,489.

FARMS STATISTICS DIVISION

Great help was rendered by this division to the public by way of gathering and keeping data or statistics on the production of crops and furnishing them to those who were in need thereof. There were printed and distributed more copies of agricultural statistics during the year than in the previous year.

BUREAU OF FORESTRY

GENERAL SUPERVISION AND ADMINISTRATION

The policy of gradually decentralizing the activities of the bureau has given greater responsibilities to the district foresters in handling their respective forest problems.

During the year there was a marked improvement in the inspection of district headquarters, forest stations, and sawmill operations.

Three new foresters, graduates of the school of forestry, University of Philippines, were appointed to take charge of four forest districts, two of which had heretofore been under experienced rangers. Due to shortage of foresters, three districts in Luzon still remain under one forester and two others in the Visayas under another.

Toward the end of the year arrangement has been made to release and assign to forest districts 34 rangers, who had been working directly under the division of forest lands and maps on land classification, to take regular ranger's work so that the district foresters can use them on any kind of work as they may find necessary and that beginning 1930 the forest districts can undertake land-classification work.

The forest claims, conflicts, and regulations section was created in June, 1929. This new section takes care of all legal work in the bureau.

COLLECTIONS

During the year, there has been collected as forest charges and other income the amount of ₱1,997,059.92. The amount appropriated by the legislature for the same year amounted to ₱789,797, of which ₱764,242.02 was actually expended, leaving a surplus of ₱1,232,817.90. In 1928 these items were ₱1,781,535.31, ₱743,216.21, ₱712,189.55, and ₱1,069,345.76, respectively. In other words, for every peso expended this bureau returned to the treasury ₱2.61.

INSPECTION AND PATROL WORK

The total number of ordinary timber and minor products license areas inspected during the year was 873, as against 1,039 license areas inspected in 1928, or a decrease of 166.

There have been detected 874 cases of violations of forest law and regulations by licensees and 1,370 cases by nonlicensees, covering a total of ₱56,938.49 in regular and additional forest charges. Forest destruction, amounting to 70,950.67 cubic meters of timber and firewood and 289,400 pieces of bohos, with a total value of ₱109,092.93 in forest charges, was also detected.

FOREIGN AND LOCAL MARKETS

There was an increase of about 21 per cent in the amount of lumber and timber exported during the year over that of the preceding year. In 1929, 104,275,592 board feet, valued at ₱7,196,724, were exported, as against 85,897,736 board feet, valued at ₱6,258,904, in 1928.

The United States continued to lead in the volume of export and Japan followed a close second, with China third. Japan, however, continued to be the leading importer of logs during this year as in 1928. The shipment of round logs to Italy during the year was greater than in any time in the history of the lumber industry in the islands.

As to local markets shipment and production continued to rise up to June, then dropped suddenly about August, probably due to the overstocking of the Manila market with a low grade of lumber which could not be disposed of owing to lack of demand. This occurred during the latter part of the year and the lumbermen were so alarmed at this situation that they even thought of curtailing

their production until such time when market returns to normal. However, the year just passed witnessed an increased shipment to local markets as shown by the fact that during the year there were 188,811,563 board feet shipped, as compared with 173,257,517 board feet for 1928.

LICENSE AGREEMENTS AND ORDINARY LICENSES WITH SAWMILLS

Four 20-year license agreements were granted during this year, with an aggregate capital of ₱1,500,000 and rated daily capacity ranging from 10,000 to 20,000 board feet, thus making a total of 17 license agreements in force as compared with 13 of last year.

A brief description of each of these agreements is given below:

Ruiz y Rementeria. s. en C.—This company, a Spanish-Filipino copartnership, was granted on March 9, 1929, a forest concession located in the Province of Camorines Sur, containing an area of approximately 38,952 hectares, of which about 18,000 hectares are accessible commercial forest, mostly of the dipterocarp species. Before entering into this contract the company had been operating the area for many years under ordinary license, and at present it has an investment of about ₱200,000.

Under the agreement the company is authorized to cut a minimum of 8,000 cubic meters of timber the first year, to 15,000 cubic meters for the fourth and each succeeding year, and also to maintain a modern sawmill with a capacity to manufacture at least 4,000,000 board feet of sawn lumber per annum. The mill now being operated by the company has a rated daily capacity of 10,000 board feet.

Juan Gallego.—Mr. Juan Gallego, a naturalized citizen of the Philippine Islands, is one of the oldest licensees of the government, having started, as far back as 1904, his operation over the same tract now under license agreement. This concession, which is located in the Provinces of Camarines Sur and Tayabas, contains an area of approximately 22,000 hectares, of which about 14,400 hectares are exploitable commercial forest, principally of the dipterocarp species. In this enterprise Mr. Gallego's investment is over ₱400,000. He has at present a circular mill with a daily capacity of about 25,000 board feet.

The contract provides a minimum yearly cut of 15,000 cubic meters of timber for the first year, to 35,000 cubic meters for the fourth and each succeeding year.

Port Lamon Lumber Co.—This company is a local corporation whose stockholders are Americans and Filipinos. Before securing the license agreement, this company had been operating the area under ordinary license since 1927, and has at present an investment of about ₱600,000. The area of the concession is approximately 45,900 hectares of which 26,000 hectares are accessible commercial forest.

The agreement authorizes the company a minimum yearly cut of 20,000 cubic meters of timber for the first year, to 50,000 cubic meters for the third and each succeeding year. There is now in operation a circular mill cutting daily about 10,000 board feet.

H. C. Heald.—The forest concession granted to Mr. Heald on April 20, 1929, contains an area of approximately 98,000 hectares, located in the Provinces of Laguna and Tayabas. It is estimated that 30 per cent of this area or 30,000 hectares are inaccessible and will be reserved for purposes of watershed protection, etc., and 50 to 60 per cent of the remainder, or 35,000 hectares, is potential agricultural land which should be cleared immediately and opened for settlement and cultivation. The forest part is mostly of dipterocarp species of which the white and red lauans, tangile, and apitong are predominating.

Under this agreement, the licensee is authorized to cut during the first year 30,000 cubic meters of timber to 100,000 for the fifth and each succeeding year, and also to maintain a modern sawmill with a capacity to manufacture at least 100,000 cubic meters of timber per annum. The required capital for the operation of this license is ₱2,000,000.

With respect to ordinary timber licenses with sawmills, there were issued during the year 78 licenses for sawmills having a rated daily capacity ranging from 1,000 to 20,000 board feet, as compared with 68 licenses of the preceding year.

Altogether, there were during the year 99 licensed sawmills as compared with 85 sawmills in operation last year.

During the year, the total additional investments expended in lumber industry in the form of new sawmills, logging machineries, railroads, wharves, replacements, etc., is estimated at more than ₱3,000,000.

As a result of the above investment the production during the year shows an increase of 18 per cent in log scale and 11 per cent in mill tally over that of last

year. In 1928, the total cut of the mill was 1,263,496.96 cubic meters log scale, and mill tally was 535,539.77 cubic meters, or 227,068,862 board feet, while in 1929 the total cut was 1,492,704.36 cubic meters log scale and mill tally was 594,983.92 cubic meters, or 252,273,182 board feet.

The above increase in the output is partly due to the activities under the four new long-term contracts which were granted this year to parties who have been holding licenses continuously for more than 20 years, and have acquired sufficient experience to make use efficiently of modern methods of logging and milling and enough capital to back up their operations. The granting of these license agreements assured the parties concerned of a long period of operation, and gave them confidence to invest more capital in milling and logging equipment than could be done under an ordinary yearly license.

With the new investments above mentioned, the total value at the end of the year of the physical assets of all the lumber firms employing modern machinery and operating under the bureau of forestry licenses, which assets include such items as logging machineries, railroads, wharves, towing ships, barges, etc., is placed at ₱20,000,000. It is estimated that if the physical assets of those sawmills that are not directly operating under government licenses are also accounted for, the figures given above will probably increase to at least ₱4,000,000 more.

ORDINARY TIMBER LICENSE

There were issued during the year 2,070 ordinary timber licenses for an amount ranging from 10 to 10,000 cubic meters as compared with 2,188 licenses of the preceding year, or a decrease of 118 licenses.

ORDINARY MINOR LICENSES

Two thousand nine hundred and thirty six ordinary minor licenses for such products as firewood, charcoal, dyewood, tanbark, rattan, oleo resin, almaciga, and others were issued, as against 3,027 of last year.

GRATUITOUS LICENSES

One hundred and twenty-three public gratuitous licenses and 2,487 private gratuitous licenses were issued during the year as compared with 128 public gratuitous licenses and 2,369 private gratuitous licenses of the preceding year.

SPECIAL PERMITS AND LEASES

During the year, there were issued a total of 1,808 new special permits as against 2,403 issued in 1928, or a decrease of 25 per cent. With the permits issued in previous years as well as those that were renewed, there were in force during the year 8,423 special permits under section 1838 of the Administrative Code as against 6,470 in force in 1928, or an increase of 30 per cent. Of the number of permits in force, 4,824 are for residences, 1,275 for pastures, 810 for fishponds, 46 for salt works, 848 for nipa and bacauan plantations, and 620 for other special uses. Aside from these permits there were subsisting 32 lease and license agreements.

GRADING AND LUMBER INSPECTION

There were 3,196.04 cubic meters graded in 1929, as compared with 1,476.57 cubic meters in 1928 and 25,858.52 cubic meters in 1927.

There are still 16 mills which are only periodically visited by scalers, while 29 mills are not visited at all due to lack of men.

KAIÑGINS

During the year the total number of permits granted was 1,269, covering an area of 6,859.343 hectares, as against 1,091 permits granted last year, covering an area of 5,391.79 hectares. Of the permits granted during the year, 1,017 were granted on public lands besides 5 permits which were granted collectively, 229 on claimed private lands, and 18 on lands leased with the bureau of lands. A total of 315 applications for kaiñgin permit was disapproved, as against 380 disapproved last year.

During the year, 1,312 kaiñgin cases were reported by the local forest officers as against 1,774 cases reported last year, and the total area cleared was 1,370.41 hectares as against 1,602.95 hectares cleared last year. The forest products destroyed were 70,950.67 cubic meters of timber and firewood, and 289,400

pieces of boho, the regular and additional charges being ₱109,092.93, as against 105,167.42 cubic meters of timber and firewood and 90,500 pieces of boho destroyed last year, valued at ₱172,134.38 in forest charges.

As usual, propaganda work on forest conservation and the lamentable effects of illegal kainigs was taken up by forest officers in conjunction with their field work.

LAND CLASSIFICATION

There were certified to the director of lands during the year 94 projects containing a total area of 1,202,069.76 hectares, as against 1,129,324.08 hectares of the previous year, or an increase of 72,745.68 hectares. Of the total area certified during the year, 385,352.37 hectares were classified as alienable and disposable, and 816,717.39 hectares as timberland, as compared with 1,014,077.37 hectares of alienable and disposable area, and 115,246.71 hectares of timberland certified in the preceding year.

Of the total area of the Philippines (29,629,000 hectares) 10,574,389.12 hectares, or 35.7 per cent, have already been classified as follows: Alienable and disposable, 7,540,229.72 hectares, or 25.4 per cent; timber land, 3,034,159.40 hectares, or 10.3 per cent; leaving a balance of 10,054,610.88 hectares unclassified, or 64.3 per cent. So far only 857 of the 1,213 municipalities and municipal districts have been partially or wholly classified.

FOREST LAND REGISTRATION CASES IN COURTS

There were received 114 cadastral and 3,027 ordinary cases, as compared with 120 and 1,850 of last year, showing a slight decrease in cadastral and an abrupt increase in ordinary cases. Due, however, to the lack of personnel in the bureau, only 5,107 cadastral lots and 1,029 parcels of ordinary cases were investigated during the year, leaving 18,160 cadastral lots and 110 parcels of ordinary cases pending inspection. Of those investigated, opposition against the registration of 550 cadastral lots and 129 parcels of ordinary cases was sustained.

PRIVATE WOODLAND REGISTRATION CASES

There were registered during the year 80 parcels of private woodlands with a total area of 6,988 hectares, 50 ares, and 27 centares as compared with 87 parcels with a total area of 8,339 hectares, 27 ares, and 88 centares of the preceding year.

There were received 109 claims to forest lands which, together with 512 claims pending decision in the previous year, make a total of 621 claims handled during the year. Of this total number of claims, 168 were decided, leaving 453 claims pending decision at the end of the year.

TIMBERLAND

There were delimited during the year 119 blocks of timberland containing a total area of 816,717.39 hectares, as against 321 blocks with a total area of 115,246.71 hectares for the last year, or a decrease of 202 blocks, but an increase of 701,478.63 hectares. With the policy of the bureau of releasing from its control all areas which are no longer needed for forest purposes, a reclassification of some of the timber blocks was made and, as a result, nine timber blocks containing a total area of 1,385 hectares were subsequently certified as alienable and disposable to the director of lands.

Up to December 31, 1929, a total area of 67,037.67 hectares of public forests has been proclaimed by the governor-general as timberlands not subject to alienation and disposition under the public land act.

FOREST RESERVES

During the year, the surveying and monumenting of five proposed forest reserves containing a total area of 17,424.76 hectares, were completed by forest surveyors of the bureau. The central cordillera of northern Luzon forest was proclaimed as forest reserve.

Up to December 31, 1929, a total area of 744,231.88 hectares has been proclaimed as forest reserves.

COMMUNAL FORESTS

There were established during the year 38 parcels of communal forests with an area of 4,121.82 hectares, as compared with 66 parcels with an area of 8,813.28 hectares of the preceding year. In addition, 15 parcels with an area of 2,331.45 hectares were amended as against 47 parcels with an area of 7,434.08 in 1928.

The communal forests in all the municipalities affected by the 1929 typhoon were suspended until September 30, 1930, in order to give the residents thereof opportunity to cut timber from the public forests within their respective municipalities for the purpose of repairing their damaged dwellings.

COMMUNAL PASTURES

Administrative Order No. 3, regarding establishment and use of communal pastures, was approved by the department secretary on December 9, 1929.

Up to December 31, 1929, there were reported 11 parcels for communal pastures containing an aggregate area of 5,088 hectares.

RECONNAISSANCE AND TIMBER ESTIMATES

The reconnaissance of three important forest tracts, namely, the Pamabaran Buri Forest in Nueva Ecija, Pampanga, and Tarlac, the Talavera Watershed Reserve in Nueva Ecija and Pangasinan, and the Bongabon Stock Farm Reserve in Nueva Ecija was, completed during the year. Approximately 1,418 hectares of timber estimates have been made.

SAMPLE PLOTS

The sample plot established in the Atimonan Forest Park, Province of Tayabas, in May, 1928, was examined in May, 1929, and the trees and seedlings were measured. The next measurement will be made in May, 1930.

GROWTH STUDIES

No new project on growth studies has been started during the year but the following are still in progress: Growth study of eight commercial species and of pure stand of Bagtikan poles and seedlings in the Makiling National Botanic Garden; and also growth of trees in the plantation.

The growth figures on 10 quarter-hectare plots in the Makiling National Botanic Garden are now available for about 100 species.

SEASONING

The project on air seasoning carried on in Kolambungan was finished about the middle of the year. Studies on kiln drying of red lauan, tanguile, and white lauan were undertaken in Negros, and a report entitled "A Study of Kiln Drying Lumber in the Insular Lumber Company's Plant at Fabrica, Negros Occidental," was submitted.

DURABILITY TESTS

The inspection of all the tests has been made regularly, some every three months, but most of them once a year.

The last examination of untreated woods which had been placed in the testing grounds in Lamao, Bataan, in 1911 and 1912, and later transferred to Los Baños, Laguna, after a lapse of 18 years showed that the following woods have survived the attacks of fungi and termites: Molave, yakal, ipil, malabayabas, tamayuan, narig, and akle. These samples have been reburied for further observation.

The treated samples of American woods which were planted 25 years ago have also been examined during the year and a good many of them are still sound. In the untreated state, these woods last only from one to two and one-half years, as they are readily attacked by termites. This test proves that when wood is treated properly it will outlast the naturally most durable species.

The durability test at Mabalacat, Pampanga, which was started in July, 1922, was likewise examined and it was found that most of the treated apitong ties are in excellent state of preservation.

The bulkhead and trestle work connecting Farola and Azcarraga Street, Manila, built five years ago, showed when examined this year that the creosoted apitong ties are intact while those of dungon have been damaged by *Sphleroma destructor* to a depth of from 2 to 3 inches.

The examination made of the durability test which is being carried out in cooperation with an American automobile concern shows that practically all the untreated American woods which are ordinarily used in the manufacture of automobile bodies in the United States have been attacked by decay, whereas practically all of the Philippine untreated woods which have been placed in the same test are sound.

The durability test which is being conducted in cooperation with the bureau of quarantine service at Mariveles, Bataan, showed that mancono, malabayabas, treated apitong, dungon, alupag, bansalagin, aranga, and ipil are resistant to the attack of *Teredo* and *Martesia*. The samples were placed in June, 1928, and examined every quarter. After a year and a half, only mancono is free from attack; the others were damaged from very slight to moderate.

Additional material of species not previously tested is now being assembled for further tests. Sections of "palma brava" (*Livistona rotundifolia*) and bamboo (*Bambusa spinosa*) will be among those to be tested. There is a scarcity of woods resistant to marine wood borers, and for this reason it is necessary to make further quest for suitable woods.

The bureau of forestry has received, from time to time, samples of commercial preservatives for testing their efficiency.

WOOD PRESERVATION

The use of treated woods in the islands is becoming more popular judging from the fact that practically all the electric-light posts of the Manila Electric Railway & Light Co. in Rizal, Laguna, Tayabas, and Bulacan Provinces are of treated apitong.

STUDIES ON MINOR FOREST PRODUCTS

This bureau has cooperated with the department of agronomy of the college of agriculture in the study of bast fibers. Bast fibers of different trees were collected and given to that department for study.

During the year, the almaciga, lumbang, and rattan industries, and the method of collecting beeswax in Davao were investigated. Studies were also made of the collection of the St. Ignatius beans in Samar, cinnamon bark in Lanao, and of almaciga resin in Nueva Ecija.

TIMBER-TESTING WORK

In the work of timber testing, in cooperation with the bureau of science, all the test pieces were selected by the personnel of the bureau of forestry to make sure not only of the species, but also of the exact origin of the specimens. About 20 species were selected, varying in amount from 500 to 1,000 board feet for each species. In the case of the more important species, efforts were made to select them from different lumbering regions in order to ascertain the strength values for each region.

FOREST ENTOMOLOGY AND PATHOLOGY

During the year, considerable collections of forest insects and fungi were made by the field men, mostly from Tayabas, Bukidnon, and Lanao. One thousand five hundred insects were mounted and stored in insect boxes awaiting study.

REFORESTATION

In the Bukidnon Quinine plantation project, the most important work accomplished during the year was the planting of quinine seedlings raised in the nursery last year. A total of 11,430 seedlings were planted as follows: One thousand and forty plants were planted at Kaatoan, Malaybalay, with the object of finding out whether quinine can be grown outside the reservation, where the conditions are different; 1,059 quinine seedlings planted in Alanib, Lantapan, and Miarayon, in cooperation with the bureau of education in its settlement farm schools; and beside quinine, there were planted 28,291 forest-tree seedlings, principally Benguet pine, narra, mahogany, molave, Eucalyptus, palomaria, and supa. Of the forest trees tried, indications show that extensive planting of narra, mahogany, and Benguet pine may be warranted. About 60 hectares were already planted with forest trees at the end of the year.

As regards the Talisay Mainglanilla reforestation project, the progress of the works is as follows: A total of 1,305.06 liters of seeds were sown in the nursery in this project during the year. The principal species sown were narra, mahogany, teak, lumbang, and ipil. An inventory of the seedlings made at the end of the year showed that there were in the nursery 48,683 seedlings available for planting next year. In addition to the above, a total of 48,967 forest-tree seedlings, principally bitaog, langil, ake, narra, and banuyo, were planted on an area of 9 hectares. There were also sown direct to the field 70 liters of lumbang, narra, and teak. According to a report of the officer in charge of this project, bitaog, malaruhat, and supa have shown poor growth among the seedlings planted.

The status of the work in the Ilocos reforestation project is as follows: As last year, the reforestation work in Ilocos was concentrated in the vicinity of Caniaw, Bantay, Ilocos Sur, where a forest nursery exists. During the year a total of 1,484.81 liters of seeds, principally akle, narra, ipil, and teak were sown. In addition, a total of 25,357 seedlings, mostly narra, supa, Bauhinia sp., teak, and kalumpang were planted on an area of 7 hectares. The number of seedlings planted is almost twice that planted last year and the area is three hectares bigger. An extensive planting survey was conducted during the year in Ilocos Norte, and it is estimated that of the total area of this Province which is 534,887 hectares, 108,495 hectares need reforestation. A forest nursery may be opened in this region next year, as soon as conditions permit.

With respect to the Agno River Valley reforestation project, the following has been accomplished during the year: The forest nursery established last year in Ambuklao, Bakod, Benguet, has a capacity of about 1,000,000 seedlings. During the year, there were sown 194.45 liters of seeds, mostly of Benguet pine, lumbang, balakat, ipil-ipil, Eucalyptus spp., and molave. There were also planted 105,099 seedlings of Benguet pine, Eucalyptus, Balakat, and lumbang. It is estimated that before the close of the year, 50 per cent of the pines, 37 per cent of the Eucalyptus, 66 per cent of the lumbang, and 34 per cent of the balakat planted this year are living. Of those planted last year, the pines have now an average height of 70 centimeters; the Eucalyptus, 40 centimeters, and the agoho, 100 centimeters. Only three of the Eucalyptus planted last year are living. The failure of these species will be studied.

COOPERATIVE PLANTING

As in past years, the bureau of forestry has cooperated with private individuals, companies, and other government entities in planting projects. This cooperative work is gradually gaining the appreciation of people interested in establishing forest plantations and has proved to be an effective means of bringing home to the people the idea of forest conservation and utilizing waste lands not fitted for agricultural purposes.

EXTENSION SERVICE

The propaganda and educational work performed by the bureau during the year was more extensive than in previous years. Forest officers in the course of their inspection gave informal talks to the people in the regions visited by them, especially in those places where forest violation and destruction are common. During the celebration of Birds and Arbor Day by the bureau of education, 24 forest officers stationed in various parts of the islands actively cooperated with the schools by giving talks, by supervising the planting of trees, or by furnishing the schools with planting materials. Approximately 10,000 people, mostly school children, attended the celebration.

Publicity work this year has also exceeded that of last year. Popular forestry articles written by members of this bureau for the information of the public were published in the newspapers.

Many requests from students in the various schools of the islands for information on forestry and conservation have been received, and available articles have always been furnished. It is the plan of this office to push this activity in the coming year with more vigor than in the past years, as public support is fundamental in rational forestry practice.

This bureau has also been of service to the public principally in the identification of woods for users and of Philippine commercial woods for export trade. A comprehensive set of wood specimens and other forest products for the Barcelona and Liege International Exposition was also prepared.

FOREST DISTRICTS

As in the past year, no changes have been made in the jurisdictions of the 14 forest districts established. However, a district forester has been assigned to each of the forest districts Nos. I and VI, which in the past year, were under administrative officers.

At the close of the year, two forest districts, namely, Nos. II and XII, were still under the administration of old and experienced rangers, but the latter remains under the supervision of the forester of forest district No. XI. This state of affairs can not be remedied until a sufficient number of men with technical training in forestry are available.

During the year, five forest stations were established and one was closed. Three of the forest stations were established so as to have a closer supervision over sawmills, while the other two were mainly for administrative purposes. At the end of the year, there were 86 forest stations in various parts of the islands, excluding the headquarters of the division of forest investigation at Los Baños, Laguna.

To increase efficiency in the administration of forest resources and other activities related to forestry business, some forest stations were transferred to other places, namely: The forest station at Denrica, Caramoan, Camarines Sur, was transferred to Lamit, of the same Province; the forest station at Los Baños, Laguna, to Lumban, of the same Province; the headquarters of forest district No. VI, at Pagbilao, Tayabas, to Ludena, of the same Province; and the forest station at Bongabon, Mindoro, to Sumagui, of the same Province.

As a whole, the forest districts, as they are organized, have been satisfactory. The urgent need in order to put into effect a more detailed plan of work for the solution of the various problems in the districts in accordance with the gradual decentralization of administration, which is being followed by the central office, is the assignment of more technical men. Some of the district foresters continue studying the forests and economic conditions of their districts so as to improve their administration. As a matter of fact, they have been of great help to the central office in giving suggestions as to changes in policy, procedure, supervision, and administration.

BUREAU OF LANDS

ADMINISTRATION AND PERSONNEL

Personnel.—During the year there were 111 appointments made to permanent positions and 276 to temporary positions, while the separations among permanent employees were 71, and among temporary, 162. Our records also show that 206 employees, 182 of whom were permanent and 24 temporary, received promotions in 1929.

Appropriation and financial condition.—The amount appropriated for the bureau of lands for the year 1929 was ₱125,895 more than that appropriated for the year 1928, the amount set aside for the former being ₱1,575,260 and for the latter, ₱1,449,365.

The receipts derived by the bureau from various sources in 1929 amounted to ₱684,079.27 as against ₱732,315.84 derived in 1928 or a decrease of ₱48,206.57. The expenses incurred by the bureau in 1929 amounted to ₱1,733,426.75 which is ₱37,436.88 less than the expenses incurred in 1928. The following table shows the per capita receipts and expenditures of the bureau of lands during the years 1928 and 1929 on the basis of the estimated population of the Philippines during those years.

Fiscal year	Total Receipts	Receipts per capita	Total expenditures	Expenditures per capita	Population
1928-----	₱732,315.84	₱0.06147113	₱1,770,863.63	₱0.14864759	11,913,167
1929-----	684,079.27	.0566179	1,733,426.75	.14346749	12,082,366

The bureau of lands' total assets as of December 31, 1929, were valued at ₱23,503,378.14, while its liabilities amounted to ₱5,193,747.26.

Documents under the custody of the bureau.—The following is a list of the kind and number of the valuable documents under the custody of this bureau:

Public lands records.....	251,164	Field notes of cadastral surveys.....	9,000
Forfeited lands records.....	133,690	Cadastral maps.....	13,000
Judicial records.....	63,917	Cadastral computation books.....	10,000
General records.....	37,713	Miscellaneous.....	5,000
Spanish lands records.....	25,417		
Records of isolated surveys.....	125,693	Total.....	809,594
Plans of isolated surveys.....	135,000		

Correspondence.—During the year 1929, there were received in this office through the mails 111,572 letters as against 106,707 received during 1928, and there were released in 1929, 327,898 correspondence as against 300,684 sent out in 1928. The tremendous volume of correspondence handled by this bureau, as revealed in the above-quoted figures, shows once more the great interest taken by the people of these islands in the acquisition of public lands.

ADMINISTRATION OF PUBLIC LANDS

Public lands concession.—The disposition of public lands during the year has been marked with unusual activity. The total number of applications received and approved in 1929 surpassed that of 1928. The following comparative table shows the different forms of public lands concessions made in 1928 and 1929, giving the number of applications of each kind, as well as the area in hectares covered thereby:

Kind	1928		1929	
	Number of applications	Area in hectares	Number of applications	Area in hectares
Homesteads:				
Received	10,005	164,469.9641	13,903	236,615.6819
Entries allowed	6,092	86,365.8917	9,160	137,257.5165
Free patents:				
Received	1,773	10,680.1365	2,115	13,963.5331
Entries allowed	1,564	5,697.5333	2,203	10,375.5959
Sales (agricultural):				
Received	1,136	99,450.8115	1,837	123,461.8143
Awarded	177	8,317.2757	183	9,789.1723
Sales (nonagricultural):				
Received	548	157.2431	986	405.2903
Awarded	56	22.5170	57	9.4520
I. G. P. sales:				
Received	452	500.6533	99	64.3400
Awarded	396	60.7160	40	48.3585
Town-site sales:				
Received	165	84.2430	340	37.7338
Awarded	42	6.0632	61	11.9378
Special purchase:				
Received			59	1.9922
Awarded			59	1.9922
Lease (agricultural):				
Received	350	63,743.5313	435	134,837.7549
Contracts executed	3	956.6144	7	2,493.0336
Lease (nonagricultural):				
Received	182	60.0875	200	55.6754
Contracts executed			1	.0256
I. G. P. lease: Received	9		4	
R. L. lease:				
Received	9		10	
Contracts executed	1	1.0005		
Foreshore lease:				
Received	110		230	
Contracts executed	2	34.9603	4	4.3959
Revocable permit:				
Received	411		593	
Permits issued	397		289	

Public lands investigations.—During the year 1929, 41,387 investigation orders were executed in connection with the different kinds of applications on file in the bureau, as against 30,127 similar orders executed in 1928.

Forfeited properties.—The number of applications for repurchase of forfeited properties received and approved during the year 1929, as compared with those received and approved in 1928 is as follows:

	1928	1929
Applications for repurchase received	9,777	4,956
Applications for repurchase approved	7,267	5,436

MINING AND MINERAL LANDS

New mineral district.—The year 1929 is characterized by the discovery of a new mining region in the municipality of Angat, Province of Bulacan. A certain Mr. George Cushing, tunnel foreman for the Atlantic Gulf & Pacific Co., working on the Bicti-Ipo tunnel of the metropolitan water district, was the first man to discover the gold vein.

With this discovery, the regions around were immediately prospected by different miners lured by the lucky strike. The result is the staking and location

of mining claims over regions extending about 12 kilometers in a north and south direction, and about 2 kilometers east and west, covering an approximate area of 2,000 to 2,500 hectares of lands supposed to contain mineral deposits.

The discovery of this new mining region in Angat, Bulacan, has increased the number of mining locations recorded in 1929 to more than double the number of locations recorded in 1928.

The Benguet mineral district.—The Antamok mines of the Benguet Consolidated Mining Co. produced during the year 112,082 ounces (troy) of gold and silver bullion, having a total value of ₱2,882,588. Many improvements have been made by this company during this year. Among them are the power plant at Agno River which cost the company approximately ₱750,000, a new mess house, and a new timber tramway, which is still uncompleted.

The Balatoc Mining Co., during the year, has installed new machinery and constructed extensive additions to the milling plant, in order to increase its capacity and efficiency. Its total output during the year amounted to ₱426,472.

Gold Hill Mining Association.—Active work is still being continued on this group, but no payable ore in any quantity has yet been discovered. This is also true of the Narva Mining Association.

Philippine Zinc Co.—During the year several deposits had been uncovered showing an average grade of 10 per cent zinc and a small amount in gold values. An experimental shipment to Japan smelters, however, indicates that these crude ores can not be shipped at a profit, due to the high cost of transportation and the "wharfage tax" of ₱2 a ton. Development work, nevertheless, is still continued with the idea of providing sufficient ore to warrant the erection of a concentration plant.

There is not much activity in the Suyoc-Mankayan region due to the low price of copper and the lack of capital.

Mineral lands surveys.—As against the 41 locations surveys comprising an approximate area of 360 hectares executed in 1928, only 19 such surveys covering an approximate area of 171 hectares were executed in 1929. The number of lode patent surveys made in 1929 doubled that of 1928. During the year, lode patent surveys were executed in four claims with an area of 30.7936 hectares at a cost of ₱480.

Only one placer patent survey was executed in 1929. No new coal or petroleum lease surveys were made in 1929. Several miscellaneous surveys, consisting of 11 underground surveys, 5 triangulation, 1 relocation and 11 topographic surveys were finished during the year.

Disposal of mineral lands.—During 1929, 671 mining claims were located in 22 out of the 48 Provinces comprising the Archipelago, as against 266 mining claims located in 16 Provinces during 1928. These 671 mining locations consist of 615 lode mineral claims, and 56 placer mining claims.

The total approximate area of the 671 mining claims located in 1929 is 5,927 hectares, while that located in 1928 is 4,987 hectares. Of the total area of mining claims located in 1929, about 5,505 hectares are covered by lode claims, and about 421 hectares, by placer claims.

The number of patents, permits, and leases in force on December 31, 1929, as well as the areas in hectares covered thereby, disposed of under the provisions of the different mining laws are as follows:

	Number	Area in hectares		Number	Area in hectares
Lode patents-----	132	1,028.7944	First-class Spanish concessions-----		
Placer patents-----	18	276.3826		481	3,963.8930
Coal patents-----	8	338.0000	Total-----		
Coal revocable permits-----	53	1,401.2597		697	10,162.9766
Coal leases-----	5	3,054.6469			

SURVEYS

Isolated and miscellaneous land surveys.—The number of isolated land surveys on hand in the field at the beginning and end of the year 1929, including those ordered and those completed during the year, is as follows:

Kind	On hand Jan. 1, 1929	Ordered during 1929	Completed Jan. 1 to Dec. 31, 1929	On hand Dec. 31
Private lands	107	127	152	82
Public lands	4,999	2,115	1,963	5,151
Miscellaneous	390	710	510	590
Total	5,496	2,952	2,625	5,823

At the beginning of the year there were 5,496 isolated land surveys pending from the previous year 1928, and at the end of 1929, this number was increased to 5,823 surveys which will be attended to during the year 1930. Comparatively, the years 1928 and 1929 stand as follows in this matter:

Year	On hand Jan. 1	Completed during the year	On hand Dec. 31
1928		2,513	2,507
1929	5,496	2,625	5,823

As regards the computation of isolated and miscellaneous surveys, there was noted an increase during the year. In 1929, 14,469 such surveys covering a total of 32,793 parcels computed in 1928. The increase represents an improvement of 26.50 per cent in the number of surveys and 11.82 per cent in the number of parcels computed in favor of the year 1929, as compared with those computed during the year 1928.

The following tables show comparatively the number of isolated and miscellaneous land surveys finally completed during the years 1928 and 1929:

Land surveys	Number of surveys	Number of parcels	Area in hectares
FINALLY COMPLETED DURING 1928			
Private lands ¹	4,772	19,376	79,889.16
Do. ²	105	201	1,533.35
Public lands	1,234	1,459	31,135.43
Miscellaneous	723	1,912	40,581.53
Total	6,834	22,948	153,139.47
FINALLY COMPLETED DURING 1929			
Private land ¹	9,163	21,256	151,395.07
Do. ²	155	323	2,453.27
Public lands	1,804	2,139	36,033.24
Miscellaneous	723	1,912	9,694.18
Total	11,490	25,096	199,575.76

¹ Surveyed by private land surveyors.

² Surveyed by public land surveyors.

It will be seen from the figures given above that the accomplishments in 1929 were greater than in 1928. The increase represents an improvement of 72.62 per cent in the number of surveys, 9.36 per cent in the number of parcels, and 30.32 per cent in the area in favor of the year 1929.

CADASTRAL LAND SURVEYS

Cadastral surveys authorized and inaugurated.—Up to the end of the year the number of cadastral projects authorized by the Governor General and pending inauguration reached to 71 in number covering 282,498 parcels with an area of 594,711 hectares.

During the year 1929 the number of projects inaugurated included a total of 34,099 lots comprising an area of 69,171 hectares. The following comparative

table shows the amount of work inaugurated during 1929, as compared with the amount of work inaugurated during 1928:

Cadastral surveys inaugurated

Year	Number of lots	Area in hectares
1928.....	44,423	223,610
1929.....	34,099	69,171
Difference.....	10,324	154,439

The cadastral projects inaugurated during the year 1929 have less number of lots than those inaugurated during the year 1928. This was due to the retrenchment policy which has been followed in order that no overdraft may be incurred at the end of the year.

Cadastral projects in progress.—On December 31, 1929, there were in progress 36 cadastral projects authorized under Acts Nos. 2259 and 3240 involving approximately 253,274 lots with an aggregate area of 764,900 hectares, as against 41 in progress in 1928 involving approximately 288,546 lots with an aggregate area of 833,673 hectares.

Cadastral projects completed in the field.—The field work on 29 projects involving 69,425 lots with an approximate total area of 157,858 hectares was entirely completed during the year 1929. A similar work completed in 1928 amounted to 23 projects involving 107,285 lots with a total area of 225,341 hectares.

Cadastral survey computations.—During the year 1929 computation work was completed on 75 cadastral projects involving 75,277 lots and covering an area of 193,216 hectares. A greater amount of computation work was completed by this bureau in 1929 than in 1928 as shown in the following table:

Year	Cases	Lots	Area	Corners
1929.....	75	73,277	193,216	636,756
1928.....	77	64,816	311,358	618,780
Difference.....	-2	+8,461	-118,142	+17,976

Cadastral survey maps.—Compared with the year 1928, the work accomplished on cadastral survey maps during the year 1929, has been a decided improvement, as shown by the following data:

Year	Cases	Number of lots	Area in hectares
1929.....	79	69,271	178,985
1928.....	56	46,607	128,999
Increase.....	23	22,664	50,986

Cadastral projects undertaken by private enterprises.—The enactment of Act No. 2989, which was repealed by Act No. 3327, initiated a new policy in the execution of cadastral surveys in the Philippines, by placing such activities within the scope of private enterprise. Act No. 3327 has been amended by Act No. 3452 of the Philippine Legislature during the 1928 session.

Since the operation of these acts, seven corporations of private surveyors have availed themselves of the facilities offered by the said acts, so that the cadastral surveys in the islands undertaken by private surveying corporations now extend to 12 Provinces and cover, up to the close of the year, an area of 218,559 hectares.

Cadastral revolving fund.—The balance sheets for the year ending December 31, 1929, of the cadastral revolving fund shows total assets amounting to ₱728,619.14, consisting of the following:

Current assets.....	₱145,183.24
Fiduciary assets.....	73,865.98
Deferred charges.....	404,635.22
Fixed assets.....	104,934.70
Total.....	728,619.14

The total liabilities amount to ₱585,888.76 and consist of accounts payable, treasury advances and deposits for cadastral surveys. Deducting the total liabilities from the total assets, there is left a surplus of ₱142,730.38 which forms the liquid capital of the fund.

The yearly collections on account of the cadastral revolving fund for the years 1928 and 1929 are as follows:

Year	Survey and monumenting costs	Penalty	Interest	Miscellaneous service income	Total
1928.....	₱136,559.76	₱10,804.21	₱16,938.37	₱29,530.60	₱192,832.94
1929.....	123,052.03	3,488.63	13,059.61	61,323.15	201,053.34

It will be seen from the preceding table that the amount collected during 1929 is bigger than that collected during 1928.

ADMINISTRATIVE SETTLEMENT OF CONFLICTS, LAND REGISTRATION, AND OTHER LEGAL WORK

CLAIMS AND CONFLICTS

Orders of investigation and reinvestigation.—The following table shows the total number of orders of investigation and reinvestigation issued during the year: 1928 and 1929, as well as that of reports returned for being defective or incomplete.

	Number
1928.....	2,404
1929.....	2,260

Disposition of claims and conflicts.—There were 2,286 decisions rendered by this bureau in 1929 as against 1,033 decisions rendered in 1928. This increase of more than 100 per cent would enable the taking of definite action on thousands of pending applications.

Disposition of motions or petitions for reconsideration.—The number of orders granting or denying requests for reconsideration, as well as that suspending the effects of decisions and executing such decisions during the years 1928 and 1929, is shown in the following table:

	1928	1929
Orders suspending effects of decisions.....	67	76
Orders granting requests for reconsideration and ordering investigation.....	25	52
Orders dismissing requests for reconsideration of decisions.....	130	166
Orders of execution of decisions.....	26	21

Appeals to the secretary of agriculture and natural resources.—Appeals to the department from orders and decisions of the director of lands were fewer in 1929 than in 1928, as shown in the following table:

Year	Number of cases either affirmed or left intact	Number of cases remanded	Number of cases reversed	Number of cases modified	Total
1928.....	69	6	3	1	79
1929.....	47	10	1	1	59

LAND REGISTRATION

Cadastral cases (acts 2259 and 3327).—There were 64 petitions filed for the institution of cadastral cases in 1929 as against 56 filed in 1928. In the petitions for 1929, 55,935 lots were involved with a total area of 294,587 hectares; while in the petitions for 1928, only 46,607 lots were involved with an area of 128,999 hectares.

Compulsory registration cases (secs. 50 and 85, Act No. 2874).—During the year 1929, there were filed 23 compulsory petitions for registration under sections 50 and 85 of Act No. 2874, as against 30 filed in 1928. The number of lots and area involved in the cases filed in 1929 were smaller than those involved in 1928, as the cases filed in 1929 had only 136 lots comprising an area of 1,440.5825 hectares, while those filed in 1928 contained 225 lots comprising an area of 30,561.3785 hectares.

Claims filed in regular cadastral cases.—The number of claims filed during the year by this bureau in regular cadastral cases, as well as the number of such claims filed for the four years previous thereto, is as follows:

	Claims
1925	56
1926	65
1927	59
1928	61
1929	80

Claims filed in compulsory registration cases.—The number of claims filed during the year in compulsory registration cases, as compared with the number of claims in such cases filed for the four years previous thereto, is as follows:

	Claims
1925	18
1926	29
1927	52
1928	62
1929	25

Court work and hearings.—The kind and number of court cases handled this year and in previous years by the attorneys of the bureau of lands are shown in the following table:

Number of civil cases (including compulsory), regular registration cases, civil cases (not registration)

1923	29	1927	192
1924	198	1928	202
1925	179	1929	184
1926	114		

FRIAR LANDS AND SAN LAZARO ESTATES

FRIAR LANDS

Appropriation and financial condition.—The amount appropriated in 1929 for the operation of the activities of the friar lands estates was ₱20,887.21 more than that appropriated in 1928. This increase in appropriation represents the sums made available for the construction of roads in the estates.

The balance sheet of the friar lands estates for the year ending December 31, 1929, shows assets in the amount of ₱2,212,044.56 and liabilities amounting to ₱233,507.39.

A comparative statement of the per capita receipts and expenditures of the friar lands estates for the years 1928 and 1929 on the basis of the estimated population of the Philippines during those years is shown in the following table:

Fiscal years	Total receipts	Receipts per capita	Total expenditures	Expenditures per capita	Population
1928	₱808,496.88	₱0.067866	₱174,195.60	₱0.0146221	11,913,167
1929	938,966.57	.07771297	201,850.86	.0167054	12,082,366

DISPOSITION OF FRIAR LANDS

Sale of vacant lots.—Up to December 31, 1929, there were sold 484 lots covering a total area of 4,814.8470 hectares valued at ₱618,604.56.

A comparison in the number of lots sold during the years 1928 and 1929, and giving value of the lands sold and their area in hectares is shown in the following table:

Year	Number of lots	Area in hectares	Value
1928	303	3,054.6919	₱461,762.70
1929	484	4,814.8470	618,604.56

Lands sold and fully paid up.—During the period covered by this report, there were paid up in full from the lands previously sold under the installment plan 3,311 lots covering an area of 11,118.5400 hectares, valued at ₱1,819,765.62.

A comparison in the number of lots fully paid up during the years 1928 and 1929, showing the area in hectares and value of the lands sold, is given in the following table:

Year	Number of lots	Area in hectares	Value
1928	1,057	1,578.2046	₱319,343.34
1929	5,311	11,118.5400	1,819,765.62

A summary of actual status of the lands sold and unsold within the 23 friar lands estates at the close of business on December 31, 1929, is shown in the following table:

Disposition	Number of lots	Area in hectares	Value
Total of lands sold and fully paid up	27,481	31,297.0985	₱5,047,884.20
Total of lands sold and partially paid up	22,371	101,944.3346	14,448,713.62
Total of lands vacant and unsold	2,015	10,160.1877	1,788,655.00
Total of lands technically vacant and temporarily reserved for the bureau of agriculture and forestry	6	1,081.1164	40,298.50

COLLECTIONS

Sources of income.—The collections from January 1 to December 31, 1929, derived from different sources, such as the payment of installments and interest on deferred payments, rents, irrigation fees, and miscellaneous receipts, amounted to ₱915,706.01.

The following statement is a comparison of the collections from the same sources during the four years immediately preceding 1929:

Year	Sale	Interest	Irrigation	Miscellaneous	Total
1925	₱732,639.07	₱218,639.02	₱2,502.01	₱3,437.02	₱957,217.12
1926	743,967.37	195,039.54	4,943.95	5,250.25	949,201.11
1927	736,515.50	186,027.92	5,955.33	4,560.03	933,058.78
1928	633,385.66	139,038.55	5,797.48	5,165.80	783,428.99

FRIAR LANDS INVESTMENT FUND

The original fund of ₱100,000 appropriated on October 2, 1907, under Act No. 1736 to be lent to friar lands purchasers, who are in need of money for the development of their lands, has reached up to December 31, 1929, the total sum of ₱364,615.01.

At the beginning of the year 1929 there were 467 total outstanding loans granted, representing an aggregate amount of ₱335,018.17. Out of this total, 43 loans were fully paid in up to December 31, 1929, showing a total collection thereon of ₱44,852.36. Expired contracts which were renewed during the year numbered 49 in all, involving an aggregate sum of ₱27,920. In addition thereto, 58 new loans amounting to ₱40,180 were granted during the year, so that at the close of the present year there existed a total of 472 outstanding loans in the

amount of ₱328,345.81. The amount of ₱36,269.20 is available for new loans in the ensuing year 1930. There were nine applications for loans pending at the end of December, 1929, involving the amount of ₱10,750.

SAN LAZARO ESTATE

Appropriation and financial condition.—The amount appropriated for the operation of the activities of the San Lazaro estate for the year 1929 was the same as that of 1928, which was ₱7,290. All of this amount was used in the payment of salaries, purchase of equipment, and for miscellaneous expenses.

The assets of the estate, as of December 31, 1929, were made up largely of current surplus and investments in fixed property valued at ₱5,489,188.69 and its liabilities amounted to ₱6,775.29, consisting of accounts payable, sheriff's fees, and freight deposits.

Disposition of the San Lazaro estate.—Since the year 1928, all available lots within the San Lazaro estate, with the exception of four small lots in front of the Bilibid Prison, had already been disposed of, so that at present the work of the San Lazaro estate section is concentrated practically upon the collection of installments due, the issuance of deeds of conveyance for fully-paid-up lots, and the administration of the San Lazaro funds.

The actual status of the San Lazaro estate is illustrated in the following table:

Disposition	Area in square meters	Value
Total occupied lands with contracts.....	612,980	₱2,074,079.82
Total occupied lands without contracts.....	455,806	1,572,338.30
Vacant lots.....	902.3	5,481.00
Total.....	1,069,688.3	3,651,929.62

San Lazaro investment fund.—Under Act No. 2478, the San Lazaro investment fund was created with a working capital originating from receipts on sales of the lands within the San Lazaro estate for loan purposes. The transactions of the San Lazaro investment fund from January 1 to December 31, 1929, are shown in the following itemized statement:

	Number of contracts	Amount
Operating capital Jan. 1, 1929.....		₱1,833,773.89
Less: Outstanding loans Jan. 1, 1929.....	528	1,791,473.01
Balance available for loans Jan. 1, 1929.....		42,300.88
Total collections on installments sales of lands to Dec. 31, 1929.....	596	44,967.00
Total collections on loans to Dec. 31, 1929.....	96	442,893.79
Total funds available for loans to Dec. 31, 1929.....		530,161.67
Less total disbursements for new loans granted to Dec. 31, 1929.....	67	323,565.92
Balance available for operation to Dec. 31, 1929.....		206,595.75
Total outstanding loans collectible to Dec. 31, 1929.....	499	1,672,145.14
Total operating capital of the San Lazaro investment fund to Dec. 31, 1929.....		1,878,740.89
Total old loans renewed to Dec. 31, 1929.....	44	310,610.00

BUREAU OF SCIENCE

PERSONNEL

The great increase in the demand for work by other government entities and by private individuals and the enlargement of the activities of the bureau has necessitated an increase of 15 in the number of personnel. The total number of employees on the pay roll as of December 31, 1929, was 360. Of these 132 composed the technical staff, 25 were clerical, while 203 were laborers, including janitors, carpenters, gardeners, watchmen, helpers, and others.

FINANCIAL STATEMENT

Expenditures, income, and free work.—The expenditures for the year 1929 amounted to ₱700,781.90 and were ₱13,528.31 less than those for 1928, and ₱21,774.20 less than those for 1927. The cash income amounted to ₱409,722.14 for 1929 and was larger than that for any previous year.

The free work done for other government entities would have had a cash value of ₱2,037,905.95, according to the bureau of science schedule of charges. The cash income and the value of the above free work amounted to ₱2,467,628.09. Subtracting from this the total expenditures of the bureau there is left a balance of ₱1,767,099.78, which represents the actual profit to the government of operating the bureau of science. The actual cost to the government is the amount expended, ₱700,781.90 minus the total income, ₱409,722.14, which leaves ₱291,059.76, for which the bureau did ₱2,037,905.95 of free work for government entities, or ₱7 worth of free work for each peso expended. In addition, free work amounting to ₱106,735.33 was done for semigovernment companies cooperating with the bureau or for the poor. The free work mentioned above includes only the actual tests and examinations made and supplies furnished and does not take into account the fact that a considerable portion of the funds of the bureau of science is expended in ways that are of direct value to the people of the Philippine Islands and for which no charges can be calculated. Among such items are the expenditures for the development of home canning and food preservation, for the development of the fisheries industries, for the prevention of rabies, for the identification of minerals, plants, and animals; and for consultations in regard to various industries. Neither does it take into account the large amount of research which is of advantage to the public, including such activities as geological and soil surveys; the study of plant diseases; the study of the medicinal constituents of Philippine plants; the cause, cure, and prevention of human diseases; and the commercial uses of various Philippine products.

ACTIVITIES

Routine.—The amount of routine done by the bureau has been steadily and rapidly increasing for several years. This is due, to a considerable extent, to the increased appreciation of the work of the bureau of science by other government entities and by the public. The amount of routine has increased to such an extent that it occupies a large part of the time of the staff. This is emphasized by the fact that during 1929 the bureau made more than 210,000 analyses, tests, and examinations, or about 700 for each working day. These figures do not include identifications of plants, animals, and minerals. The amount of routine work done at present not only exceeds that of any past period but it is done in a more accurate and satisfactory manner than at any previous time since the establishment of the bureau. The bureau of science does work and manufactures supplies, mostly free of cost, for practically all insular government entities. Brief mention is made below of some of the large items for various entities.

(a) *Philippine health service.*—The bureau of science manufactures vaccines and serums in large quantities for the Philippine health service. The bureau of science sold to the Philippine health service 4,190,855 doses of vaccines against cholera, typhoid, cholera and typhoid, dysentery, and smallpox, and furnished free of cost 4,062,020 units of vaccine against cholera, typhoid, combined cholera and typhoid, and dysentery. In addition, considerable amount of other products were either sold or furnished free to the Philippine health service. Although there were no epidemics during the year, the Philippine health service took larger amounts of vaccines and serums than in the previous year.

The bureau of science serves as a laboratory for the Philippine health service. During the year there were examined free for the health service 42,542 samples of feces, 10,181 samples of foods, alcohols, and beverages, 6,461 samples of water, and 50,463 rats for plague. In all, free examinations for the Philippine health service were made on 117,801 specimens.

(b) *Public welfare commissioner.*—The office of the public welfare commissioner was furnished free with 39,490 bottles of tikitiki extract for the cure of beri-beri. These had a sales value of ₱27,643.

(c) *Bureau of quarantine service.*—The samples collected by the bureau of quarantine service are sent to the bureau of science for analysis. More than 16,551 free examinations for that service were made during 1929.

(d) *Board of pharmaceutical examiners and inspectors.*—The Bureau of science serves as a laboratory for the board of pharmaceutical examiners and inspectors

and makes all analyses for them in connection with the enforcement of the drug law.

(e) *Bureau of supply*.—The bureau of supply buys many articles on specifications, and those articles are tested by the bureau of science. During 1929 there were made 18,816 such examinations without charge for the bureau of supply.

(f) *Bureau of public works*.—The bureau of science examines free of charge all samples of cement, concrete, and artesian-well water for the insular projects of the bureau of public works. During 1929 about 6,461 such free examinations were made. Also a large number of samples was submitted by the bureau of public works for analysis or test for provincial or municipal projects.

Research.—The important research done by the army medical research board, and that in connection with the Rockefeller Foundation and the Manila Railroad are mentioned under the heading of cooperative activities. The most outstanding accomplishments along research lines are the following:

(a) *Medical biology*.—The duration of immunity to yaws in Philippine monkeys; serologic studies in experimental yaws; the relation with regard to treponema antigen of the Wassermann and Kahn reactions.

(b) *Botany*.—Extensive studies on Philippine orchids; biochemical study of *Clathrocystis aeruginosa* (Kuetz) Henfr (this alga frequently produces a bad odor along the shore of Laguna de Bay and sometimes in Manila); critical investigation on the internal structures of the leaf and bark of the six important species of cinnamon was completed; field control experiments on the die-back disease of cacao; field experiments on rice diseases, particularly *Sclerotium*—general plant-disease survey work—including tomato wilt, tobacco mosaic, coffee diseases, and leaf-spot and stem rot of peanuts; laboratory investigations on the strains of anthracnose attacking such plants as the mango, cacao, anona, chico, atis, guava, avocado, cassava, and madre cacao, were made to determine their cultural variations and virulence to the different hosts; and other chemical, morphological, and pharmacological studies of different species of Philippine plants.

(c) *Fisheries*.—A chaetodont new to the Philippines has been described; study of two Japanese fishing methods; effective types of fish corrals in the Visayas; study of Dalag, Kunduli, and Ipen fisheries in Laguna de Bay and Northern Luzon; study of greatly improved methods of fish preservation.

(d) *Organic chemistry*.—Philippine starches; chaulmoogryl, substituted phenols and chaulmoogryl hydroxy ethyl benzoate; chaulmoogryl amino phenols and chaulmoogryl benzylamine; composition of Philippine coffee; resins in the seed coats of Philippine chaulmoogra seeds (*Hydnocarous alcalae*); chaulmoogryl brom and chlor phenols; the seguidillas bean has been found to have a high content of a valuable oil; composition of Philippine bagasse; water-white coconut oil and coconut flour have been produced by a simple process (the flour makes excellent cakes); Philippine black coral; composition of some Philippine fruits, vegetables, and forage plants; Philippine camphor; statistics and tests of gasoline marketed in the Philippine Islands; the vitamin contents of Philippine foods; Philippine eucalyptus oil (the yield in the Philippines has been found to be surprisingly high); thiochaulmoogra compounds; a very exact analysis has been made of Philippine lumbang oil.

(e) *Inorganic chemistry*.—The method of determination of available alkalinity in commercial lime; an inexpensive method for improving the appearance of buntal fiber or of articles made of such material has been devised; a study of the mechanical properties of the common Philippine bamboo has been completed (the strength of bamboo has been found to be surprisingly great); the nail-holding power has been determined for Philippine woods used as ties; spike-holding power of woods used for ties as compared with creosoted apitong; chemical, mechanical, and microscopical analyses of papers with the end in view of drafting paper specifications for the use of the government; artesian-well waters in Manila and neighboring municipalities; relative radioactivity of deep-well waters in Manila and vicinity; investigation of Philippine vitrifiable clays.

(f) *Soils and fertilizers*.—Reconnaissance soil survey of the mainland of Albay Province; investigation on the relation of soil type to the growth of abaca and the quality of fiber; the biological method for the determination of soil reaction; sugarcane bagasse and waste molasses as sources of energy for the bacteria in the fixation of atmospheric nitrogen.

(g) *Geology and mines*.—Study of the geology of the region in the neighborhood of the site of the Botocan River hydroelectric development project; geologic investigation of earth fissure at Loay, Bohol, and investigation of artesian well sites in Camotes Island, Cebu; geologic reconnaissance of Culion Island; lead

and zinc prospects in Baguio; examination of gold prospects in the Angat mineral district; geologic reconnaissance of Calivo, Capiz, and vicinity; Mayon Volcano and its eruptions; a geological study of the Angat-Novaliches region; potable artesian water in Rizal Province, Luzon; drilling on limestone reefs in Cebu; antamokite, a new mineral; geology and underground-water resources of central Panny; summary of Philippine land shells; underground-water resources of the Ilocos Central Plain; the coral reefs of the Philippine Islands; statistics of mineral production in the Philippine Islands, the chromite deposits of Zambales, (this deposit has proved to be very extensive and valuable); the lead and zinc deposits of Eastern Marinduque.

Home canning and food preservation.—A popular activity of the bureau is the demonstration of methods of canning and preserving fruits and vegetables. These demonstrations are given by the bureau of science demonstrators throughout the Archipelago. The recipes used were developed in the bureau, and their demonstration to housewives has resulted in extensive use of homemade preserves. This activity has also resulted in the establishment of commercial canneries. During the year, demonstrations were given in 60 towns in 12 Provinces.

The demonstrators, in addition to doing demonstration work in provincial towns, have also collected Filipino recipes for cooking, 507 such recipes having been tried in the laboratory. The best of these, together with foreign recipes suitable or modified to be suitable for the Philippines, will be printed in a cook book and will be used by the demonstrators for the instruction of the public.

Publications and library.—The Philippine Journal of Science, embodying the results of the research work of the bureau, was issued in three volumes in 1929, with an aggregate of 1,504 pages, 254 plates, and 124 text figures.

The Philippine Journal of Science is sent to 932 paid subscribers and exchanges, and 105 copies are distributed free for review to associate editors and other parties. The total mailing list is 1,037. This is distributed as follows: Philippines, 90; remainder of Asia, 199; Europe, 291; North America, 345; South America, 31; Africa, 33; Australia and neighboring islands, 48. These figures show that the Journal is widely distributed to scientific institutions in all parts of the world.

Three monographs were issued during the year and one is in press. The last one issued is No. 27, entitled "Filterable virus and rickettsia diseases," by E. B. McKinley.

The library has continued to grow in size and usefulness and has maintained its high standard of excellence. During the year, 3,637 bound volumes and 7,527 unbound volumes, parts, and pamphlets were added, making a total of 120,009 bound and unbound volumes, parts, and pamphlets at the close of the year. The library receives 2,322 scientific serials, of which 454 are paid subscriptions, 704 exchanges, and 1,164 free. The number of publications used and charged out was 66,897 or a daily average of 183 publications. The number of visitors recorded in the library was 24,910.

Museum display (work exhibits).—As in previous years, the museum display of the bureau of science, showing its scientific activities, has been visited by a great number of people. In order to demonstrate the work of the bureau and to give instruction to those people the bureau has continued the enlargement of its series of cases in the corridors on the first floor, in which there are displayed collections of birds, fishes, insects, shells, corals, sponges, and other animals, as well as plants and plant diseases. The cases also contain exhibits illustrating the work of the bureau and products manufactured by the bureau. This exhibit has proved very popular and has attracted an increased number of visitors.

COOPERATIVE ACTIVITIES

United States Army Medical Department Research Board.—As in the past the United States Army Medical Department Research Board occupied quarters in the bureau of science. Cooperation with the board has been a great help to the bureau of science and the results of the board's work are of value not only to the bureau but to the Philippines as a whole. The board does no routine work, its activities being confined to research. The investigations conducted by the board were as follows:

Some experiments dealing with the possibility of insect transmission of leprosy, which were begun by Colonel Vedder several years ago, have been continued. Additional experiments have also been made to determine the time required for lepra bacilli to be eliminated by *Aedes aegypti*.

A study was made of pathological materials from cases of so-called nonvenereal or tropical *bubo*.

A survey of *Melitensis-abortus* infections conducted during the year included agglutination tests with sera from a large group of Filipinos and Americans and also of sera from cattle, carabao, and goats.

The etiology of Equine Dhobie itch, an annoying chronic skin disease of horses and mules, was investigated.

Experiments which are still in progress were planned in an attempt to develop a practicable method for the immunization of large numbers of horses and mules against tetanus.

The field investigations of native carriers of malaria and the mosquito surveys, conducted in 1928 on the island of Corregidor, have been followed by a most satisfactory reduction in the incidence of malaria at Fort Mills.

Experimental studies have been made of the epidemiology, transmission, etiology, symptomatology, immunity, treatment, and prevention of dengue.

Rockefeller Foundation.—During the year 1929 the Rockefeller Foundation had no representative stationed regularly at the bureau of science until Dr. Paul F. Russel arrived to take up the study of malaria.

Early in the year the bureau cooperated with Dr. Clark Yeager in his work on the possible danger of artesian wells becoming polluted by a movement of organisms from latrines through the soil.

Manila Railroad.—As during the past four years, the work in cooperation with the Manila Railroad Co. has been conducted by Dr. T. Dar Juan, who has been stationed in the bureau of science. In addition to research activities Doctor Dar Juan supervises the control analyses of coal, cement, lubricants, and other materials.

In addition to the control analyses of materials and supplies purchased by the Manila Railroad Co., service tests were conducted on three coals offered in the local market, also on various grades of lubricants and fuel oils, both for steam and internal-combustion engines, to determine their value and suitability for the use of the company. Whenever time was available the consumption of fuel of various trains and types of engines was also tested. As in the past years, part of the time was devoted to the supervision of the paints and alleys laboratory of the bureau of science.

Metropolitan water district.—As in past years the metropolitan water district has supplied a chemist particularly for the chemical examination of the water of Manila. The chemist makes several determinations daily of the chlorine content of the city water, while a bacteriologist of the bureau of science examines the water several times each day for bacterial content. The results of these examinations are highly satisfactory and indicate that the city water, as it comes from the tap, is safe for drinking and other domestic purposes.

WEATHER BUREAU

There were but 4 depressions and 10 typhoons near or over the Philippines in 1929. Of the 10 typhoons, only 5 had the center over the islands. By far the worst of all was the Infanta typhoon which, threatening for a while the city of Manila, inflicted considerable damage to the Provinces of southeastern and central Luzon, gave rise to extraordinary floods, was responsible for the death of over 350 persons, the break of the water mains of the Montalban water supply, and the sinking of the *Mayon*, ship of the Manila Railroad Co.

The annual distribution of rainfall in the Archipelago has been generally above the normal.

The seismic activity has been somewhat greater in 1929 than in 1928. In 1929, 547 disturbances were recorded by the seismographs, as against 408 in 1928. Of these, 309 were definitely within the limits of the Archipelago. The greatest earthquake shock was felt on June 15, 1929, in the eastern part of Mindanao.

The magnetic activity seems to have declined slightly in 1929. During the year 28 magnetic disturbances occurred—15 light, 9 moderate, and 4 great.

The eclipse of the sun on May 9, 1929, was successfully observed at Cebu and Iloilo. The weather bureau cooperated with the astronomical parties sent by the Hamburg Observatory, Naval Observatory, Washington, D. C., and the Johns Hopkins University. Photographs of the corona were taken and observations were made on atmospheric electricity and sky polarization.

The year has been characterized by perfection in internal improvements, energetic preparation of publications, attendance at the Pan-Pacific Congress of Java, and greater activity along astronomical lines, especially in the observation of the eclipse on May 9, 1929.

NATIONAL MUSEUM

HISTORICAL SURVEY

The Philippine Museum came into existence in 1901 when the Philippine commission passed Act No. 384, establishing under the department of public instruction, an Insular museum of ethnology, natural history and commerce, and placing it temporarily under the immediate supervision of the chief of the Bureau of non-Christian tribes which was changed in July, 1903, to the bureau of ethnological survey.

Shortly after the creation of the bureau of ethnology survey, the museum was transferred to the Philippine exhibit in the Louisiana Purchase Exposition at St. Louis in 1904. After said exposition, the museum was reorganized under the name of Philippine Museum, and placed definitely under the control of the bureau of ethnological survey.

On October 26, 1905, the bureau of ethnological survey was abolished by Act No. 1407 as a separate bureau, and was constituted the division of ethnology under the bureau of education. On October 6, 1906, by Act No. 1541 of the Philippine commission, the division of ethnology was transferred from the bureau of education to the bureau of science. Extensive collection of specimens was made by the museum from 1909 to 1913. By the appropriation act for 1913, the division of ethnology was abolished, but the museum was retained in the bureau of science.

In 1914 the secretary of the interior definitely eliminated the ethnology work of the bureau of science and transferred the museum specimens to the University of the Philippines. This institution could not, however, provide funds for the maintenance of the museum, and so it was again retransferred to the bureau of science in 1915.

By virtue of Act No. 2572, creating the Philippine Library and Museum, the bureau of science museum became the division of Philippine Museum of the new office on March 28, 1916.

ORGANIZATION AND PERSONNEL

The national museum was created as an independent entity by virtue of act No. 3477, which was passed in November, 1928, with the former museum division of the Philippine Library and Museum as its nucleus. The bureau actually started to function on February 1, 1929.

The national museum being a new office, its first days were devoted to the selection of the personnel, the requisitioning of the necessary equipment and supplies, and the opening of the books of accounts to take care of the financial work of the new institution.

In view of its limited appropriation only very necessary positions were created, and wherever possible different positions were combined into one. At present the personnel of the museum is composed of 16 employees, including the director.

MUSEUM EXHIBITS

At the marble hall, Ayuntamiento.—Some of the museum collections, are now on exhibit at the marble hall of the Ayuntamiento, which has been assigned to the national museum for its temporary use. Although the marble hall is inadequate for the purpose, the national museum has succeeded in putting up an exhibit of the household furnitures typically Philippine which are now very rare and on the verge of extinction. For lack of space, exhibits had to be placed together instead of segregating them into rooms as they should be. There is therefore a mixed exhibit of household furnitures, porcelain and ceramic wares, and works of famous Filipino painters.

At the port area.—The other museum collections are on exhibit at the two-story building located on the Twenty-fifth Street port area. Most of the collections therein are ethnographical specimens, which number about 10,000 in all.

The first floor, designated "Philippine Hall," houses the ethnographical collection from the Christian Provinces and from the Carolines, and a few historical, archaeological, and other artistic specimens. On the second floor, which is divided into four rooms connected by open archways, are the collections from the Mohammedan and pagan population, most of which are ethnographical. The order of their arrangement now is as follows:

First room: Collections from the Mohammedan people of Mindanao-Lanao, Magindana, Sulu, Samal, and Yakan Moro groups.

Second room: Collections from the pagan people of Mindanao-Bogobo, Manobo, Mandaya, Ata, Bilaan, Tirurai, Mangguangan, Guiangan, Tagakaolo, Obo, and Subanum groups.

Third room: Collections from the Kalinga, Apayao, Tinggian, and Ilongot groups.

Fourth room: Collections from the Ifugao and Igorot groups.

There are three valuable collections in the museum, namely, the Alvarez-Guerra collection, the Saleeby Moro collection, and the Tojada collection. The Guerra collection consists of many old objects, dating back to the eighteenth century and earlier. The Saleeby collection is the finest Moro collection to be found anywhere. The Tejada collection is made up of ethnographical objects from the Caroline Islands, supposed to be a part of the Philippines up to the year 1898, and is considered to be the best of its kind.

There is also an interesting collection of historical objects, such as the garrote, weapons used by the Katipunan, also known as the K. K. K., and others connected with the lives of Dr. José Rizal, Apolinario Mabini, Andres Bonifacio, and other famous Filipinos.

Cooperation.—The national museum, through loans of exhibits, cooperated with the national library and the University of the Philippines in the exhibition of historical relics. The Katipuniana exhibition of the national library was held in August, 1929; and the University of the Philippines celebrated the national heroes' day on November 30, 1929.

COLLECTION OF SPECIMENS

In order to increase the former collection of specimens several trips were made by employees of the museum during the year, covering the Provinces of southern and central Luzon and some Visayan Provinces as Antique, Iloilo, and Capiz. Representative types of household furniture dating as far back as the seventeenth century, which were testimonies of the artcraft and good carpentry work of the Filipinos, were obtained. Rare specimens of porcelain and ceramic wares of Chinese origin, brought to the Phillipines during the early days, were also acquired, and our collection can now compare favorably with Philippine collections of other foreign museums.

The following were acquired during the year 1929:

Purchase:	Pieces
Porcelain and ceramic wares	392
Antique household furniture	30
Ethnographical objects	112
Donations: Miscellaneous objects	100

SPECIAL ACTIVITIES

RICE AND CORN FUND

[Act No. 2818, as amended]

Total loans granted.—Up to December 31, 1929, there were 554 agricultural credit cooperative associations distributed in 35 Provinces, 355 of which obtained loans under Act No. 2818, as amended, amounting to ₱1,943,990, or an average of ₱5,476 for each association. At the close of the year 195 associations remained indebted to this fund.

One hundred and sixty associations have liquidated their loans in the amount of ₱639,500, together with the corresponding interest thereon, and at the close of business on December 31, 1929, the outstanding loans receivable amounted to ₱562,142.59.

Status of the fund.—The standing of the fund at the close of business on December 31, 1929, is as follows:

Fixed assets: Furniture and equipment (including the ₱343.96 from interbureau transfer)	₱2,465.89
Liquid assets and deferred charges:	
Cash, insular treasury	860,636.69
Loans receivable	562,142.59
Supplies and materials in stock	13.09
 Total assets	1,425,258.26
Liabilities: Accrued leave payable	1,646.73
 Total assets, Dec. 31, 1929	1,423,611.53

Operation.—The transactions during the year 1929 may be summarized as follows:

Total loans granted to agricultural credit cooperative associations	₱30,000.00
Repayment made on loans	140,402.28
Interest collected	44,104.55
Total collections made	184,506.83
Income collected, 6 per cent interest	44,104.55
Less:	
Salaries	₱6,935.49
Wages	420.00
Traveling expenses of personnel	615.73
Postal, telephone, telegraph, and cable service	87.64
Miscellaneous service	20.00
Consumption of supplies and materials	127.97
Maintenance and repair	4.22
Furniture and equipment	14.70
Total	8,225.75
Net gain for 1929	35,878.80

It will be noted from the above table that the net gain of ₱35,878.80 for 1929 is less than that for 1928, which amounted to ₱37,141.13. This is attributable to the fact that many of the applications for loans filed before June 30, 1929, the date when the operation of the law creating this special fund was to cease automatically were not granted inasmuch as it was not then known that the provisions of said law would be extended.

STOCK HERDS AND FARMS

[Act No. 2758]

General statement.—As in 1928, there were in 1929 three stock farms in operation, one located in Dumarao, Capiz; one in Ubay, Bohol; and the third, in Bon-gabon, Nueva Ecija. On January 1, 1929, there were on all the three stock farms, 3,476 head of cattle and 334 carabaos, including the 32 animals under the care of the bureau of agriculture, all valued at ₱275,054.38. At the end of the year there were 3,223 head of cattle and 302 carabaos valued at ₱254,283.40. These numbers do not include the 622 head sold during the year.

The following table shows the comparative number and value of the animals for the years 1928 and 1929, excluding the value of horses:

	1928	1929		1928	1929
CATTLE					
American Hereford	2	1	CARABAOS—continued		
Multany	34	28	Indo-Chinese	167	126
Nellore	895	862	Native	86	92
Native	367	253	Grade	6	
Grade	2,154	2,051	Total	334	302
Ayrshire Indian	24	27	HORSES		
Indian Sussex		1	Native	6	6
Total	3,476	3,223	Total	3,816	3,531
CARABAOS			Total value	₱275,054.38	₱254,383.40
Indian	81	78			

Births and deaths.—Four hundred and fifty-three calves were dropped during the year on all the stock farms above mentioned. The number of deaths has reached a total of 116 head with a book value of ₱10,168.60.

Purchases and sales.—One grindstone for Ubay stock farm and one syringe for Dumarao stock farm were purchased during the year for ₱26.78, both classified as equipment and added to fixed assets. Six hundred and twenty-two head of animals with a book value of ₱53,880.81 were sold for ₱24,589.66.

Cash and fixed assets.—The total assets at the close of 1929, exclusive of the 453 young calves dropped during the year, amounted to ₱312,222.32, as against ₱327,466.41 at the end of 1928.

FIBER STANDARDIZATION BOARD

[Act No. 3263]

Membership.—The terms of office of the following four members of the board expired on June 30, 1929: Mr. Mariano de Garchitorena, representing the producers; Mr. Juan Camahort, representing the dealers or middlemen; Mr. H. L. Heath, representing the local rope manufacturers; and Mr. L. L. Spellman, representing the exporters. To fill these vacancies, the following persons were appointed: Mr. Joaquin M. Elizalde, vice Mr. H. L. Heath, to represent the local rope manufacturers; Mr. Ramon J. Fernandez, vice Mr. Juan Camahort, to represent the dealers or middlemen; and Mr. L. L. Spellman, to succeed himself, in representation of the exporters. On December 31, 1929, Dr. Manuel L. Roxas was appointed ad interim member of the board. No mention, however, was made as to Doctor Roxas's representation in a board, but as there was only one vacant position left—that of the member to represent the producers—it is presumed that he has filled said position. The first three new appointees took their oaths of office and duly qualified as such members before the end of the year, while Doctor Roxas took his oath of office later.

Personnel.—At the end of the year, 1929, the board had a total of 79 officers and employees, 55 of whom were in the inspection and 24 in the administration force.

Inspection stations and grading-baling establishments.—The following inspection stations, as in 1928, were maintained during the year under review: Manila, Cebu, Davao, Legaspi, Zamboanga, Casiguran, and Malitbog.

A total of 95 establishments for the grading and baling of Philippine fibers, with established commercial grades, were in operation during the year.

Scope of work.—During the period from January 1, 1929, to December 31, 1929, inclusive, 1,797,213 bales of all Philippine fibers with established grades were inspected, approved, and certified, 45,151 bales rejected, and 6,656 bales reclassified from approved bales.

Inspection fee and financial status.—Effective June 1, 1929, the amount of fee charged for each bale of Philippine fiber inspected, stamped, and certified, whether approved or rejected, or reclassified from approved bales, was reduced from 15 to 10 centavos per bale.

There has been collected from January 1, 1929, to December 31, 1929, the sum of ₱254,121.87. The total expenditures for the same period amount to ₱157,037.82. At the close of business at the end of the year the board had a superavit of ₱97,084.05 (exclusive of the surplus of ₱8,541.33 for 1926; ₱26,968.57 for 1927; and ₱54,504.48 for 1928).

Agricultural aid.—By virtue of the authority conferred upon the board by section 1796-B of Act No. 3263, the sum of ₱51,000 out of the surplus of ₱105,504.48 for 1928, was released and turned over to the director of agriculture, through the insular auditor, on January 24, 1929, to be used, with the approval of the honorable, the secretary of agriculture and natural resources, for the continuance of the educational and research work in connection with Philippine fibers.

The board was informed by the chairman that at the beginning of the year 1929, there was on hand the sum of ₱12,157.23, the unexpended portion of the previous turnover, which, if added the sum of ₱51,000 as reported in the next preceding paragraph, will give a total of ₱63,157.23 for expenditure for the purposes above specified. From this total amount, the sum of ₱33,895.26 was expended during 1929, leaving a balance of ₱29,261.97.

Constitutionality of fiber law.—In our report for the year 1928, mention was made of the decision rendered by the court of first instance of Manila in the writ of mandamus filed by former Senator Juan B. Alegre against the insular collector of customs, holding the vital sections of Act No. 3263 unconstitutional. The Supreme Court of the Philippine Islands, as the court of final appeal in this jurisdiction, reviewed the case and resolved the main issue involved by reversing the decision of the trial court and upholding the constitutionality of the portion of said Act No. 3263 questioned in that case. This decision eased those who, during the pendency of this case, were under the impression that the board might be dissolved any minute. Also, it automatically quashed all pretensions of paying fees under protest. It may be said that to the few who had been bothered by this litigation, the decision of the supreme court came as an assurance of a definite continuance of the fiber standardization board.

Statistics.—In addition to the monthly report of fiber baled, inspected, approved, and certified, there was being issued monthly export statistics showing the out-

ward movement of Philippine fibers. These monthly figures have been very favorably commented upon both here and abroad, and are now being taken by the trade as the most reliable monthly reports issued from the Philippine Islands. As some one has remarked, "these reports as now compiled and issued constitute the bible of the fiber trade." To give the trade further service along this line, a stock inventory of all baled fibers which have been inspected, approved, and certified in the different establishments was taken as of December 31, 1929.

CONCLUSION

The year just passed has witnessed an increase in the activities of all the bureaus and offices of this department. This increase of activities which has made the year 1929 a normal year from the standpoint of the economic well-being of the Filipino people is due partly to the spirit of loyalty and cooperation shown, as a whole, by the department's officials and subordinate employees and also to the cooperation of the inhabitants of this country who have shown a growing desire to elevate their economic standard to a higher level.

The undersigned is happy to state that in spite of the yearly calamities that afflict the country in the form of long drought, typhoons and plant pests, and diseases, which calamities have grown to a bigger proportion last year, our farmers generally succeeded in increasing the total acreage planted to the major crops and in obtaining the highest yield per hectare. A good sign of our economic progress is shown in the greater number of applications for the acquisition of public lands, received in 1929. Lumbering activities, the exploitation of our mineral resources and scientific research work were on the upward trend.

It is expected that the ensuing year will be as productive as, if not more than, the year just passed, of fruitful results regarding the exploitation and development of the agricultural and other natural resources of the country. Our expectation in this regard is justified by the passage last year of several constructive legislative measures that will be helpful to this department in carrying out the government's program of extensive economic development.

Very respectfully,

RAF. R. ALUNAN, *Secretary.*



ANNUAL REPORT OF THE SECRETARY OF COMMERCE AND COMMUNICATIONS

MANILA, March 22, 1930.

His Excellency the GOVERNOR GENERAL, Manila.

SIR: I have the honor to render the annual report of the department of commerce and communications for the year ending December 31, 1929, as follows:

The business of the department of commerce and communications has considerably increased since the undersigned assumed the office of secretary of the department. This greater activity is but faintly reflected in the rising number of correspondence released through the records division of the executive bureau. (While in 1927 only 16,027 pieces were thus routed, 18,139 pieces were coursed in 1928, and 21,074, in 1929.) For this office did more than paper work, as much of its business is done by conferences, investigations, and other modes not affected by red tapes and not recorded in the executive bureau. This increased business, together with the varied functions of the department, mostly technical in nature, compelled the undersigned to have the position of another undersecretary created by Act No. 3530. To the position thus created, the honorable undersecretary J. V. Bagtas was appointed, effective on August 1, 1929. Prior to his appointment, Mr. Bagtas had been acting as undersecretary during the absence of the honorable Undersecretary C. E. Unson, who went to London as a delegate to the universal postal congress held in that city in May. Mr. Unson returned to Manila on December 5 only, after an absence of 265 days.

On October 12, 1929, Undersecretary Bagtas left the Philippines, heading a delegation of engineers to the World Engineering Congress held at Tokyo. He returned to Manila on December 5, 1929.

Both undersecretaries rendered separate reports to your excellency of their respective missions.

During the absence of Mr. Bagtas, Mr. Antonio Aquino, assistant purchasing agent, bureau of supply, was detailed to the department to sign ordinary papers by authority of the secretary of commerce and communications. Mr. Luis Francisco, a division engineer of the bureau of public works, was also detailed to this department as technical advisor during the absence of Mr. Bagtas with authority to sign routine bureau of public works papers.

GREATER RESULTS OF THE YEAR'S WORK

As one of the outstanding achievements of the present administration may be mentioned the discovery of graft and other irregularities that existed for some time in the bureau of commerce and industry and in the bureau of posts. This is the result of intensive and extensive investigations conducted upon the initiative and under the direction of the undersigned.

The investigation of the bureau of commerce and industry was carried out continuously between January 25 and June 3. The principal irregularities found were the big shortage of ₱95,965 in supplies and materials, mostly lumber amounting to ₱91,687, and the exorbitant expenses on work performed by the engineer island establishment. In the Tubbataha Lighthouse construction work alone, it is calculated that the big sum of ₱84,000 was unnecessarily spent. Because of unwarranted expenditures, mismanagement, and losses suffered by that bureau, several officials and employees were dismissed or otherwise separated from the service. Among them were the assistant director, the superintendent of the marine railway and repair shops, the chief of the navigation and lighthouse division, the chief accountant, the storekeeper, the medical inspector, and other minor officials and employees. The director resigned.

The investigation of the bureau of posts was ordered on May 11. Among the several irregularities unearthed were: Importation of opium through the mails; loss of postage stamps amounting to more than ₱375,000; loss of the stamps belonging to the foreign collection; exorbitant prices paid for supplies and materials; short deliveries of said materials; falsification of records; numerous irregularities in the accounting, etc. For these irregularities, the superintendent of the Manila post office, superintendent of the money order division, the superintendent of the accounting division, several chiefs of sections, and two postal inspectors,

were administratively dealt with, the penalties ranging from suspension to dismissal and prosecution in court. The investigation of the bureau of posts was not yet terminated at the close of the year. The irregularities and anomalies discovered in the bureau of posts as in the bureau of commerce and industry were mostly committed during the period from 1924 to 1928.

Reports of corrupt practices in other offices under this department indicate that the investigation work which the undersigned has imposed upon himself will yet continue for some time to come.

Recognizing that efficiency is fundamental in the achievement of success, this department has taken steps toward having the business of the department and its bureaus done efficiently. In all contracts now entered into by the government which fall under the jurisdiction of this department, the principle that the lowest responsible bidder should be given the contract has been adhered to very strictly. The lowest responsible bidder has been defined by the department as the bidder who not only offers the lowest bid price, who has the needed equipment and necessary capital, but he who, in addition to these attributes, is possessed of proved technical ability and experience for the kind of work to be undertaken.

Extensions of time requested by the contractors have never been acted upon without a thorough previous study of the attending circumstances, and never granted unless fully justified.

The government has been continuously losing large sums of money due to grossly erroneous estimates prepared by certain engineers in the bureau of public works. To cite just one example: The Laguna Courthouse was advertised for bids; the lowest bid was so much higher compared with the cost estimated by the district engineer that work was started by administration; later on, after computing all expenses, it was found out that the total actual cost was very much more than that called for in the rejected bid. As a result of this, a department order was issued limiting the variance between the Bureau of Public Works estimates and the actual cost of construction, to 15 to 20 per cent. Any result outside of this limit was made subject to drastic action by the order.

In an effort to secure a more proficient public service from the bureaus under its control, even in technical matters, this office has not followed there commendations of bureau chiefs with blind confidence. To cite an example: Some time in April of the year under review, the director of public works recommended the release of ₱225,000 for the continuation of construction work on the Laoag Vintar irrigation system. Before acting on this recommendation, this department had the matter investigated by a committee of competent technical men. The report of this committee revealed the fact that the sum recommended by the bureau was inadequate for the purpose intended. The department, therefore, decided not to release the sum requested without further study of the matter, recommending to the Governor General only the giving of ₱30,000 necessary to cover operation expenses during the rest of the year of an important portion of this system.

This office has sometimes also taken direct action upon certain phases of government administration which are ordinarily within the scope of bureau activity. For example, because of the many complaints about the administration of irrigation systems, this department took occasion to create a special investigating committee to study all the systems in operation in the Philippine Islands in all their phases—technical, economic, and administrative. This committee is still engaged in this task. This department hopes that it will be able to render its report very soon, and that the proper reforms can be undertaken at an early date.

The other larger results of positive character were:

Transportation and laying in Philippine waters of 280 miles of modern, efficient, and durable cable lines.

Surfaced roads constructed and designated first class, 381.9 kilometers.

Reinforced concrete bridges and culverts completed, 87. (In this figure, concrete pipe culverts are not included.)

Successful deep wells completed, 82.

Reinforced concrete buildings completed, including only buildings of over 100 cubic meters capacity, 132.

Waterworks projects completed, 24.

Total population served, 64,725.

COMMERCE

The general trend of business in the Philippines since the end of the postwar revival period in the early part of 1925 remained practically stable. A new normal level much higher than that of the pre-war years was reached. This level was somewhat disturbed during the second half of 1929 when the volume

of business in the islands threatened to fall abruptly, but the disturbance was limited in extent and of short duration. Taken as a whole, Philippine business during the year was moderately active. It registered a normal increase over the business of the preceding year.

The first half of 1929 was characterized by a general upward movement of business in the islands. The volume of foreign trade made record increases, and the monetary circulation likewise increased to keep up with the demands of trade. Domestic agricultural production was at a high point. Only the general price level remained stagnant. The low prices that had ruled for most of the major crops of the islands since 1927 continued practically unchanged. The rise in the value of business operations in the domestic and foreign trade in spite of such stagnation of prices at the old low level showed the more clearly the great increase that was made in the volume of business.

The sudden slump that came at the middle of the year, of course, cut down considerably the gains made during the first half. A big decline in exports, accompanied by a corresponding fall in the local monetary circulation, dragged down the general business trend to the lowest point it ever reached since 1924. But the decline did not long continue and during the last quarter of the year, there was a marked improvement in the general business situation in the islands.

There was nothing of serious portent, however, in this temporary slump. It did not appear to be the beginning of a major downward movement in the country's business. It was but a minor spurt, sharp and precipitous though it was, and the trough of its temporary ebb was already passed. Since September, when the minor depression reached its limit, there was a distinct, though moderate upward trend of business.

This sudden business collapse during the third quarter of 1929 could be attributed to a number of causes: First, it was apparent that the foreign buyers of Philippine exports had filled most of their necessities for the year with the unusually big volumes of purchases they made during the first six months. Their early buying was probably made in order to take advantage of the low prices that prevailed. Hence, shipments of Philippine exports during the third quarter of the year were considerably less. Another cause of the slump were the destructive typhoons that wrought considerable damage on crops and property in the Visayan Islands and in Southern and Central Luzon in June and September. Besides the losses and destructions occasioned by the typhoons, the general financial situation in the country immediately became more stringent, as the many planters and business men directly affected crowded the local banks with their numerous applications for individual crop and special loans. Then, also, the continued stagnation of the prices of Philippine staples at the low level which kept on almost unchanged during the last three years could not but aggravate the depressing effects produced by the first two causes named.

With a livelier trading about the close of 1928, business men became more optimistic of the future and made large commitments extending toward the first months of 1929. But business did not rise to the level generally expected, and after the increase of the first few months both the import and export trade slid downward. Sharp as the slump was and although prices were uniformly low, both the volume and the value of the total imports and exports registered a new high level in the annals of Philippine foreign trade. The following are the monthly figures of imports and exports for 1929 compared with those for 1928:

Month	1928			1929		
	Imports	Exports	Total	Imports	Exports	Total
January-----	₱26,277,536	₱27,784,582	₱54,062,118	₱26,514,049	₱29,760,860	₱56,274,909
February-----	19,559,380	27,470,845	47,030,225	21,523,295	33,116,049	54,639,344
March-----	24,929,796	29,357,681	54,317,477	22,098,701	35,677,507	57,776,208
April-----	19,190,635	28,690,864	47,881,559	28,142,057	35,027,948	63,170,035
May-----	19,789,865	24,696,983	44,486,848	26,510,893	26,184,074	52,694,967
June-----	18,499,727	26,593,539	45,093,266	26,797,897	32,987,758	59,785,655
July-----	28,045,453	19,511,813	47,557,266	21,579,474	22,935,036	44,514,510
August-----	23,107,017	19,650,719	42,787,736	29,039,000	21,276,916	50,315,915
September-----	20,973,037	23,485,215	44,458,252	23,536,147	18,666,475	42,395,650
October-----	25,036,050	27,996,241	53,022,291	25,926,212	20,469,438	46,395,650
November-----	20,779,614	21,195,180	41,974,794	18,766,920	23,393,480	42,160,400
December-----	23,125,626	33,625,430	56,751,056	23,885,874	29,398,144	53,284,018
Total-----	269,313,796	310,109,092	579,422,888	294,320,549	328,893,685	623,214,234

The foregoing figures show that the total imports increased by 9.29 per cent while the total exports increased a little over 6 per cent. During the first five months of the year the increases were 14 and 16 per cent respectively. Only few items of imports registered a decrease. The most important was cotton goods. The dry-goods trade was weak and uncertain for many months, but a decrease in importation should make its statistical position better for 1930. Most of the other imports increased, the increases ranging from insignificant figures to as high as 300 per cent. In the group registering the highest percentage was found rice which increased from ₱3,922,977 to ₱11,620,026. Fertilizers also increased from ₱3,686,367 to ₱5,763,248, a hopeful sign for the agricultural industry of the country. Structural steel rose around 10 per cent.

The export trade was more irregular than the import business, while a great number reported an increase, not a few suffered a severe slump. Maguey, copra, desiccated coconut, gums and resins, hats, shells, pearl buttons, raw and refined sugar, cigars and a few others not only suffered due to low price levels but more particularly to slashed demand in the foreign markets. On the other hand, buntal fiber, knotted hemp, embroideries, coconut oil and, more moderately cordage, copra meal, fish products, vegetable lard, centrifugal sugar, leaf tobacco, and lumber and timber made sufficient gains to give the total export a lead of over 6 per cent over the 1928 record.

The movement of the domestic trade correlated closely with that of the foreign trade. It started auspiciously upon a higher plane than last year but the upward movement was short and was followed by a precipitous slump accentuated by a seasonal sagging movement during the same season. The textile business had not entirely picked up from the depressed condition since 1927 and 1928. Retailers were more concerned in cleaning up their shelves and bought only for replacement in some cases, in others the closing of business became a necessity. Imports of textiles barely equaled that of 1928. On the other hand the silk-goods business acquired a greater demand. Construction materials—lumber, steel, paint, cement, etc.—made quite a satisfactory year. The automobile business was apparently strong especially with the low-priced cars, although it would seem not as satisfactory as was expected and desired. With a relatively small crop for local consumption rice fared better than in 1928, although, due to the expected enforcement of the bonded rice warehouse law, prices sagged deeply about the end of the year. Foodstuffs and other household necessities were likewise slow, consumers buying on a hand-to-mouth policy.

The aggregate sales of merchants, manufacturers, and peddlers for the entire year according to the bureau of internal revenue totaled ₱1,189,749,154 as compared with ₱1,248,096,226 for 1928, or a decrease of 23.5 per cent.

Prices of commodities.—A low price level, which is apparently world-wide, prevailed throughout the year. Wholesale prices of export commodities followed almost a straight line throughout the period and imported products almost to the same degree indicated no movement than a wider margin. Fluctuations were infrequent and low. Rice alone sagged deeply at the end of the year but ran higher than last year generally. Abaca (manila hemp), copra, sugar, coconut oil, and lumber registered slight improvements during the last months. On the whole for the export products, the market was quiet and slow, although a bigger volume changed hands. Abaca (manila hemp) decreased 15.7 per cent; sugar, 12 per cent; copra, 16 per cent; and coconut oil, 7.5 per cent. Quotations for leaf tobacco increased 10.6 per cent and for rice 14.5 per cent; while lumber and maguey made perceptible gains. The imported articles followed the export articles' trend. Retail prices, however, maintained their level the year previous in spite of hand-to-mouth purchases.

New investments.—The launching of many new business enterprises was made manifest by the increase in the number of new corporations and partnerships registered at the bureau of commerce and industry. A total number of 345 new corporations organized to do business in the Philippines were registered as compared with only 275 new corporations registered during the year 1928. The number of partnerships registered also showed a slight increase. No data were available on the number of new business ventures established by individuals during the year, but in view of the evident spread of greater interest in business in the islands, it might be safely stated that further gains were also made in this direction.

New investments in business operations during the year likewise showed a notable increase. The amount of capital actually paid into the funds of the newly established corporations reached ₱11,822,266, as against ₱8,056,615, or an increase of nearly 47 per cent over the capital actually invested during the previous year.

The subscribed capital of the new corporations organized in 1929 amounted to ₱14,999,215, as compared with ₱11,509,945 for 1928.

The biggest firms incorporated during the year were: Central Sara-Ajuy, La Tondena (Inc.), Menchaca Hnos., Cu Unjieng & Co., Insular Sugar Refining Corporation, Lim Bonging y Hnos., Veloso Development Co., Ong Long & Co., Beam Investment Co., Kendwa Meiyasu Co., Destileria a La Fortuna, Pacific Lumber Co., Ram Car (Inc.), Pedro Siochi & Co., Manila Motor Co., Uy Matiao & Co., Santa Monica Apartment Corporation, Kwong Ah Poy & Co., F. Marquez Lim (Inc.), and Yucuan Seh Drug Co.

The growth in industrial enterprises especially owned by Filipinos and the more buoyant condition of industries as compared with other lines characterized the year 1929. The total investment in new industrial establishments amounted to ₱4,847,337 as against ₱1,647,970 in 1928. While no data are available on the output of manufacturing establishments, the export figures clearly indicate the growth of Philippine manufacturing industries. While the total increase of exports amounted only to 6 per cent, the aggregate of products of manufacture increased by 12 per cent. The construction of big plants and buildings during the year, which are changing the old skyline of Manila into that of a progressive western city, further attest to the steady movement leading to the industrialization of the country. While not entirely devoted to industrial purposes, the continuous increase in the "debts to individual accounts" may be partly interpreted as indicating increased movement in our industrial production. The average weekly debts to individual accounts—money withdrawn largely to pay wages—increased from ₱32,450,000 to ₱33,200,000.

BUREAU OF PUBLIC WORKS

ORGANIZATION AND PERSONNEL

Two new engineering districts having been created during the year, the Philippine Islands were on December 31, 1929, divided into 49 engineering districts which were coextensive with provincial limits, the city of Manila being considered a province for this purpose. At the head of each district was the district engineer who carried out activities of the bureau in the district and other duties imposed by law, excepting the larger irrigation projects which were constructed by project engineers under the direct supervision of the Manila office. These districts were grouped into four divisions at the head of which was a division engineer who supervised the districts comprised within his division. The central office in Manila prepared plans and specifications for construction projects and exercised general supervision over all the activities of the bureau.

There were 13 Americans and 540 Filipinos paid direct from bureau and project funds as of December 31, 1929. The corresponding figures for December 31, 1928, were 14 Americans and 540 Filipinos. The technical employees as of December 31, 1929 were 10 Americans and 225 Filipinos. The corresponding figures for December 31, 1928, were 9 and 217, respectively.

ROADS AND BRIDGES

The total of funds made available for road and bridge work amounted to ₱16,896,681.82 as compared with ₱16,192,691.49 for the year 1928. The former sum consisted of ₱7,896,181.82 from general taxation (provincial road and bridge funds); ₱1,200,000 from collection under act 3045 (motor vehicle law); ₱4,000,000 from collection under act 3248 (gasoline tax law), and insular appropriation amounting to ₱3,809,500. The collection under act 3248 suffered a reduction of ₱500,000, but this shortage was more than covered by an increase of ₱200,000 in the collection under act 3045 and an increase of ₱993,500 in the insular appropriation under act 3460. Of this total amount, ₱2,000,000 were not released for expenditure until late in December, so that this fund remained unexpended at the end of the year.

The year saw constructed 380.1 kilometers of new first-class roads, 289 kilometers of second-class roads, and 79.1 kilometers of third-class roads all of which, added to the total kilometerage of roads in 1928, give a total of 12,640.5 kilometers of first, second, and third class roads on December 31, 1929.

From allotments under act 3045 and act 3248 given to the various Provinces, 181.6 kilometers of existing water-bound macadam roads have been treated with asphalt, either by the penetration method or by surface painting, at an average cost of ₱3 per square meter for the first method and ₱0.45 per square meter for

surface treatment. Wherever asphalt has been used, the maintenance cost has been reduced to approximately 50 per cent of what the ordinary water-bound macadam roads used to cost before. In view of this encouraging result practically all the provinces are now endeavoring to surface with asphalt their sections of roads which are subjected to heavy traffic.

The more important road-construction projects undertaken during the year are briefly described in the following paragraphs:

Agusan-Surigao interprovincial road, Agusan Province.—Passing through rich agricultural lands of Agusan and Surigao Provinces, suitable to the cultivation of hemp and coconuts, this road project, when completed, will be approximately 45.7 kilometers long. During the previous years 10.5 kilometers of the road were graded. During this year 7.8 kilometers of the graded portion were surfaced and 2.6 kilometers of new subgrade were completed, in addition to the construction of several temporary bridges. The total amount expended during the year was ₱29,807.14.

Ligao-Panganiran Road, Albay Province.—The project is for approximately 38 kilometers of road to connect the municipality of Ligao, which is in the central part of Albay, with the southwest coast of the Province. Near the town of Ligao, the road traverses large tracts of lands already planted with hemp and young coconut trees, while toward the coast the line goes through public lands which can be developed into productive agricultural lands. The work accomplished during the year included 7 kilometers of subgrade, 5 kilometers of metalling, the construction of several temporary wooden bridges, and the preliminary survey from kilometer 50 as far as Panganiran Bay. The total expenditure during the year amounted to ₱51,542.04.

Bataan-Zambales interprovincial road.—Running between the municipalities of Dinalupihan in the Province of Bataan and Olongapo, a seaport in the Province of Zambales, the road, when completed, will form the overland route to Manila for the inhabitants of Zambales and western Pangasinan. The Zambales section is 22.2 kilometers long and the Bataan section 19.5 kilometers. About 6½ kilometers of metalling and 2 kilometers of subgrade were accomplished in the Province of Bataan during the year at a total cost of ₱43,821.59, and nearly all the subgrade work was completed in Zambales at a cost of ₱24,974.32.

Batangas-Cavite interprovincial road.—Connecting Tuy, Batangas Province, with Indang, Cavite Province, this project will establish a direct road from Manila to western Batangas, following the ridge on the west coast of Lake Taal. The proposed road is 19.1 kilometers long on the Batangas side and 22.2 kilometers on the Cavite side. During the year the section on the Batangas side was graded to within 2 kilometers of the provincial boundary, and a length of 6½ kilometers was surfaced. On the Cavite side only 2.53 kilometers were added to the subgrade previously accomplished, making a total length of 8.09 kilometers of finished subgrade from Indang toward the boundary. The amount of ₱37,472.45 was expended this year on the Batangas side, and ₱25,979.18 on the Cavite side.

Loay interior road, Province of Bohol.—This is a coast-to-coast road project with the town of Loay as the terminal on the south coast and the barrio of Ipil as the terminal on the north coast of the island. The project calls for a total length of 79.4 kilometers, 53.8 kilometers of which had been completed first class in previous years. After the grading of the remaining 25.6 kilometers from the Bohol agricultural colony to the barrio of Ipil was completed, the surfacing of the graded section was undertaken. First course metalling was completed from kilometer 72.4 to kilometer 74 by administration, and surfacing materials were furnished for kilometers 89.90 and 91 under the "paquiao" system. The total amount expended during the year was ₱24,610.33.

Cagayan Valley road, Cagayan Province.—This road will be approximately 117 kilometers long. The work being undertaken is the construction of the unfinished section from Alcala to Lal-lo, a distance of approximately 45.66 kilometers. During the year 4.09 kilometers of second-class road and 12.5 kilometers of first-class road were completed. There were also delivered along the road enough crushed rocks to surface 3 additional kilometers. The widening of the sections at kilometers 50, 51, 65, 66, and 74 was also accomplished. Several galvanized-iron pipes were installed and a number of wooden bridges were constructed or reconstructed. The total expenditure during the year amounted to ₱146,470.42.

Cagayan Valley road, Isabela Province.—The length of this road in Isabela is approximately 148.9 kilometers, of which 73.1 kilometers had been completed in previous years. The work is divided into two sections, the Ilagan-Cauayan section, which is 34.8 kilometers long and the Ilagan-Cabagan section, 41 kilometers long. On the first section 24.75 kilometers of road were completed as

first class in addition to the changing of all temporary culverts with reinforced concrete pipes and the construction of two 36-meter trestle bridges over the Bangag Creek and the Balug River. Surfacing material for second and top courses have already been delivered along the sections of the road which have not been completed as first class.

Considerable amount of work was also accomplished on the Cauayan-IIagan section. During the year, 20 kilometers of this section were completed as first class and all temporary culverts were replaced with reinforced concrete pipes. The delivery, spreading, and rolling of the third course surfacing for kilometers 392, 393, 394, 396, 399, and 400, were also completed before the end of the year.

The total amount expended for these two sections during the year was ₱105,504.80.

Cagayan Valley road, Nueva Vizcaya Province.—In the Province of Nueva Vizcaya, this road is 103.8 kilometers, of which 19.8 kilometers between Bayombong and the Nueva Ecija boundary remained to be done on January 1, 1929. Besides the widening of subgrade in different sections of the road, 12.3 kilometers were constructed as a first-class road before the end of the year, thereby leaving only 7.5 kilometers of unfinished road near the Nueva Ecija boundary. A timber bridge was constructed over the Abian River in addition to the construction of spur dikes in the Magat River at Bambang to protect the road from being flooded. The expenses made during the year amounted to ₱94,017.07.

Capiz-Antique interprovincial road, Capiz Province.—On the Capiz side, this road is approximately 60.9 kilometers. The section between Banga and Balete had been completed as second class and opened to vehicular traffic before the end of the year. In addition, approximately 7 kilometers of subgrade were completed and five temporary wooden bridges and several concrete pipe culverts were constructed in different sections of the road. The total expenditure during the year amounted to ₱46,832.11.

Capiz-Iloilo interprovincial road, Capiz Province.—This road is 30.4 kilometers long on the Iloilo side. On the Capiz side 6 kilometers of 6-meter subgrade were completed together with the construction of three temporary trestle bridges and two truss bridges at a total cost of ₱46,832.11. On the Iloilo side the grading work of the entire road was completed during the year by the "paquiao" system, and the manufacture of concrete pipes was started. The total expenditure on the Iloilo side during the year amounted to ₱23,191.48.

Cotabato-Davao interprovincial road.—Of all the interprovincial road projects under construction, this is undoubtedly the project that will tap the largest area of rich agricultural lands. The proposed road is 127.4 kilometers long on the Cotabato side and 87.8 kilometers on the Davao side. Of the total amount of ₱25,389.60 expended during the year ₱6,577.70 were used for the investigation and survey of the section between Pikit and Davao boundary. The work accomplished was the grading of approximately 2½ kilometers of road and the construction of four trestle bridges and placing of concrete pipes. The expenditure incurred on the Davao side during the year amounted to approximately ₱31,628.82 and the work accomplished consisted in the construction of approximately 5 kilometers of subgrade and the laying of several concrete pipes.

Cotabato-Lanao interprovincial road.—The Cotabato section of this road is 58.1 kilometers long and the Lanao section 105 kilometers. In Cotabato Province the amount of ₱62,008.70 was expended during the year with the following work accomplished: Six kilometers of subgrade with 4 kilometers surfaced as second class; surfacing materials for 2 kilometers delivered on the road; completion of one-half kilometer as first class, and the construction of five wooden bridges.

On the Lanao side the expenditure incurred during the year amounted to ₱29,949.60 and considerable amount of work was accomplished. The most important work done was the construction of 10.3 kilometers of subgrade and 17 timber bridges of different spans. Before the end of the year the section between Tugaya and Ganasi was opened to automobile traffic.

Camarines Norte-Camarines Sur interprovincial road.—This road is 16 kilometers long on Camarines Norte side and 62 kilometers long on Camarines Sur side. The work accomplished during the year in the Province of Camarines Norte comprised the clearing and grubbing of 8 kilometers of roadway, the construction of 7 kilometers of roadbed, the metaling of a section of approximately 4 kilometers with first course and the blasting of boulders and rocks on a section of approximately 5 kilometers. The total amount expended amounted to ₱47,903.06.

Considerable amount of work was accomplished in the Province of Camarines Sur. Of the 25 kilometers which were graded previously, 22 kilometers were surfaced as second-class roads during the year. In addition, the section from

kilometer 26 to kilometer 40 was cleared. The total amount expended in this Province during the year was ₱24,614.86.

Camarines Norte-Tayabas interprovincial road.—The combined length of this interprovincial road is 140.6 kilometers—78 kilometers in the Province of Camarines Norte and 62.6 kilometers in Tayabas. The sum of ₱37,569.44 was expended in the Province of Camarines Norte for the construction of 5 kilometers of a 5-meter roadbed and for the widening of the 3-meter trail to 5 meters on different sections of the road. The total length of the sections which had been widened was approximately 4 kilometers.

In the Province of Tayabas, the work accomplished during the year was the construction of 1.2 kilometers of roadbed on the Gumaca-Lopez section and 5.3 kilometers on the Sumulong-Vinas section at a total expenditure of ₱51,277.75.

Baybay-Abuyog road, Leyte.—An appropriation of ₱45,000 was set aside for the construction of this road during the year. Of this amount ₱39,652.31 was expended before the end of the year for surfacing the section from kilometer 8 to kilometer 12, inclusive, and for the reconstruction and repair of the road and structures damaged by the flood which occurred during the month of May.

Misamis-Zamboanga interprovincial road (Dapitan-Plaridel section).—This road is 25.22 kilometers long on the Misamis side and 34 kilometers on the Zamboanga section. The amount of ₱24,694.81 was expended on the latter section during the year, and the work accomplished was the grading of approximately 7 kilometers and the light surfacing of the sections that become muddy under traffic during the rainy season.

In Misamis Province the sum of ₱21,617.56 was expended for the construction of approximately 14 kilometers of subgrade, 1 kilometer of which was surfaced as a second-class road.

Occidental Negros-Oriental Negros interprovincial road.—In Oriental Negros this road is 34 kilometers long and the work accomplished was the completion of 11 kilometers of second-class road and the construction of 6 kilometers of new subgrade. The total expenditure during the year amounted to ₱40,256.50.

The Occidental Negros section of this road is 37.7 kilometers long and the work undertaken during the year was the surfacing of the entire section as second class. The total amount expended in this section during the year is ₱43,500.59.

Pampanga concrete road, Pampanga Province.—The sum of ₱837,280.65 was expended on this project during the year and 25.77 kilometers of concrete pavement were completed. This work was formerly done by contract, but due to the slow progress made by the contractor, the contract was canceled about the latter part of January and the work undertaken by administration.

Taft Avenue extension, Rizal Province.—This is 3.34 kilometers long in Rizal Province. This avenue, when completed, will greatly relieve the present congestion of traffic on the Manila-South road through Pasay. The whole section was practically graded last year. During this year 2.18 kilometers of the road were completed as a water-bound macadam road surfaced 10 meters wide. The sum of ₱32,737.67 was expended on this project during the year.

Rizal Avenue extension, Rizal Province.—The sum of ₱36,968 was expended for asphaltating the Rizal Avenue extension. The total length of the road which has been asphalted is 2.4 kilometers.

Catbalogan-North road, Samar Province.—When completed this road will connect Catbalogan, the capital of the Province, with the municipalities on the northwest and the north coasts of Samar. At the close of the year, the status of this project was as follows: 46.5 kilometers classified as a first-class road and 41.7 kilometers, as a second-class road. The expenditure was ₱80,959.97.

BRIDGES

The more important bridges completed during the year are briefly reported as follows:

Sinalang River Bridge, Abra Province.—This bridge, consisting of one 160-foot and two 53-foot steel spans, with concrete floor, is of great importance to the Province as it is located on the Ilocos Sur-Abra interprovincial road. Eighty per cent of the substructure and superstructure of the bridge was completed before the year began. The remaining 20 per cent of the superstructure was finished and the bridge was opened to traffic in the early part of the year.

Dayhagon Canal Bridge, Cebu Province.—This is a swing bridge composed of two 50-foot steel swing spans with a clearance of 39 feet and 2 inches between piers. It is located at kilometer 106 of the Cebu-North road. The contract to furnish the steel superstructure, turntable mechanism and other necessary fittings was awarded to the Atlantic Gulf & Pacific Co. The contract for the construction

of the substructure and erection of the superstructure was awarded to Mr. Valeriano Segura of Cebu. The bridge was completed on October 16, 1929, and was opened to traffic on the 29th of the same month.

Medellin River Bridge, Cebu Province.—This bridge is located at kilometer 118 of the Cebu-North road, and consists of a reinforced concrete arch, 16-meter span and a rise of 3 meters. The contract for the construction was awarded to the Butuan Saw Mill (Inc.), of Cebu, and by the end of the year the bridge was practically completed.

Camp 3 Bridge, Cebu Province.—This bridge is located on the Cebu-Toledo road, and consists of a 16-meter concrete arch with 6-meter clear roadway. The work was undertaken by administration and started during the early part of March, completed in June, 1929, and opened to traffic in the early part of July of the same year.

Mananga River Bridge, Cebu Province.—This bridge is located at kilometer 10 of the Cebu-South road and consists of three 150-foot steel truss spans on concrete abutments and piers supported by wooden pile foundation. The contract for the construction of this bridge was awarded to Hoa Hin Co. (Inc.), local contractors of Cebu, excluding the structural steel, which was furnished by Mr. A. G. Yankey of Manila. The work was started in February, 1929. Due to several causes the contractors were not able to complete the bridge within the contract time, and were given an extension of time. The bridge was completed on November 28, 1929, inaugurated and opened to traffic on December 28, 1929.

Rancho River Bridge, Batangas Province.—This spans the Rancho River at kilometer 139 of the Cuenca-Banaybanay Lipa road. It was constructed with a loan fund from the postal savings bank. The project was advertised for bids in the early part of the year and the proposal of Mr. Marion E. Martin, of Manila, was accepted. The bridge is one 100-foot steel truss span. The contractor did a creditable work, completing the bridge within the specified contract time. The bridge was opened to traffic on October 20, 1929.

Wahig River Bridge, Bohol Province.—This bridge is located at kilometer 73, Loay-Interior road, and consists of one 130-foot steel truss span with reinforced concrete floor and abutments. Its construction was contracted by the Butuan sawmill of Cebu, except the furnishing of the structural steel which was awarded to the Atlantic Gulf & Pacific Co. of Manila. The project was completed in the early part of the third quarter of this year and was immediately opened to traffic.

Loboc River Bridge, Bohol Province.—This bridge is located at kilometer 89 of the Bacani-Carmen road, and consists of one 80-foot riveted pony steel truss with reinforced concrete floor and abutments. Its construction was let by contract to Mr. Ignacio Molina, of Mabini, Bohol. The furnishing of the structural steel was given to the Atlantic Gulf & Pacific Co. The project was completed and opened to traffic on May 25, 1929.

Tullahan River Bridge, Bulacan Province.—This bridge is located at kilometer 9 of the Manila-North road, and consists of three 10-meter spans of reinforced concrete slab and girder with a clear roadway of 5.50 meters. The work was done by contract within the stipulated time. It was completed and opened to traffic in April, 1929.

Meycauayan River Bridge, Bulacan Province.—This bridge is located at kilometer 19 of the Manila-North road, and consists of two 120-foot steel spans on two reinforced concrete abutments and one center pier. The work was let by contract to Mr. Feliciano Nable and was completed and opened to traffic in the second quarter of this year.

Cava River Bridge, La Union Province.—This bridge has eight 9-meter spans of standard reinforced concrete slab and girder superstructure on reinforced concrete piles. It is located at kilometer 282 of the Manila-North road. Construction work was let by contract to Messrs. Fukusawa and Ito. The bridge was inaugurated and opened to traffic on March 15, 1929.

Naguilian River Bridge, La Union Province.—This bridge is located on the Bauang-Baguio road, kilometer 301, and consists of three 150-foot steel spans on concrete cylinder piers and one reinforced concrete abutment and a wooden approach on the east end of the bridge. The contract for furnishing the structural steel was awarded to Mr. A. G. Yankey, of Manila, and that for the construction of the substructure and the erection of the steel, to Mr. Tan Sameo, also of Manila. Construction work was started in April, 1928. Due to floods in August of that year and to the scarcity of labor during the rainy season the progress of the work was rather slow. The project was not completed as stipulated in the contract and an extension of time had to be given to the contractor. Even with the exten-

sion of time given, the contractor was unable to complete the bridge on time and consequently he had to pay liquidated damages in the amount of ₱2,370.

Oroquieta River Bridge, Occidental Misamis Province.—This bridge is located on the Misamis-North road, kilometer 43, and consists of two 120-foot steel truss spans on concrete abutments and pier on wooden pile foundations. The contract for this bridge was awarded to Mr. Marion E. Martin, of Manila. The work was completed and the bridge opened to traffic in April, 1929.

Pampanga River Bridge, Nueva Ecija Province.—This bridge consists of thirteen 150-foot steel truss spans on concrete abutments and piers. This project was formerly under contract with Mr. Juan Ferrer, of Manila, but when it was seen that the contractor would be unable to complete the work within the specified time, the contract was annulled and the work undertaken by administration. The bridge was completed in September, 1929. The completion of this bridge has solved one of the worst stream crossings on the Manila-North road. It is located at kilometer 121 of this road.

Binituan River Bridge, Nueva Ecija Province.—This bridge consists of one 160-foot steel truss span on reinforced concrete abutments and spans the Binituan River at kilometer 156 of the Manila-North road. The work was undertaken by Mr. Fortunato Concepcion, a contractor from Pasig, Rizal. It was done in accordance with the plans and specifications and the workmanship was excellent. The bridge was completed on time and was opened to traffic in the third quarter of the year 1929.

Calatrava River Bridge, Occidental Negros Province.—This bridge is located at kilometer 62 of the Bacolod-North road, and consists of eight 9-meter slab and girder spans on reinforced concrete piles, with a roadway of 4.88 meters in width. It was constructed by administration as the only bid received was not considered advantageous to the government. The bridge was completed in the second quarter of the year and opened to traffic in June, 1929.

Danao River Bridge, Occidental Negros Province.—This bridge consists of six 9-meter spans of standard concrete slab and girder type. It is located on the Bacolod-North Road, kilometer 101, and was completed and opened to traffic in the early part of the year.

San Fernando River Bridge, Pampanga Province.—This bridge is a 22-meter concrete arch type with timber foundation piles. It has a clear roadway of 6 meters and 1-meter sidewalks on each side. The work was started on October 3, 1927, and the bridge was completed, inaugurated and opened to traffic on February 21, 1929. It is located in the town of San Fernando, kilometer 73 of the Manila-Tarlac-North road.

Cut-Cut River Bridge, Tarlac Province.—This bridge is located at kilometer 112 of the Manila-Tarlac-North road. It consists of one 160-foot steel span on reinforced concrete abutments, with a clear roadway of 4.88 meters. The contract for furnishing the fabricated steel was awarded to Mr. A. G. Yankey, and the construction of the substructure and erection of the steel, to Messrs. Arranza and Concepcion. The construction work was slightly delayed due to some modifications in the plans for the south abutment by providing some timber pile foundation. The project was completed on February 28, 1929.

Parua River Bridge, Tarlac Province.—This bridge consists of three 130-foot steel spans with concrete piers and abutments and a roadway of 4.88 meters. The contract for this project was awarded to two contractors, namely, Mr. A. G. Yankey, who furnished the fabricated steel, and Mr. Manuel G. Palma, who constructed the substructure and erected the steel superstructure. The bridge was completed and opened to traffic on March 15, 1929. It is located at kilometer 104 of the Manila-Tarlac road. Its completion and that of the Cut-Cut River Bridge have made possible for the Province of Tarlac to have a highway connection with Manila throughout the year.

San Isidro River Bridge, Tarlac Province.—This structure, which is located at kilometer 159 of the Manila-Tarlac-North road, consists of five 9-meter concrete slab and girder spans on reinforced concrete piles and has a clear roadway of 5.50 meters. It was completed in February, 1929.

Malaking Illog River Bridge, Tayabas Province.—This bridge spans the Malaking Illog River across the boundary line between the Provinces of Tayabas and Batangas, at kilometer 124 of the Candelaria-Bolbok road. It is of two 100-foot steel truss spans on reinforced concrete abutments and pier. The contract for the construction of the substructure and the reinforced concrete floor slabs and the erection of the steel superstructure, including the painting, was awarded to Mr. Feliciano Nable of Manila, while the contract for furnishing the fabricated steel was given to the Atlantic Gulf & Pacific Co. Mr. Nable was unable to complete his part of the work within the contract time, which expired on November

19, 1928. For this reason, his contract was annulled on February 24, 1929, by the provincial board of Tayabas. The work was resumed on February 27, 1929, by administration, and the bridge was completed and opened to traffic on October 21, 1929.

BUILDINGS

MANILA

The following are the important insular buildings under construction during the year:

New post office.—The new post-office building is the most important insular building undertaken during the year. The construction of the foundation was begun on August 2, 1920, and finished on January 9, 1922. Further construction work was suspended for lack of funds. On February, 1928, however, it was resumed, and at the end of the year the construction was approximately 56 per cent completed. This project is being undertaken by contract for ₱1,706,807.99.

U. P. Library Building.—The U. P. Library Building is a 3-story concrete building 41 by 33.86 meters. The structure is with concrete and wood pile foundation, concrete walls and partitions and flat galvanized-iron roofing. The work is under contract for a consideration of ₱127,289.86. At the end of the year the building was about 30 per cent completed.

Male chronic pavilion, psychopathic hospital.—The male chronic pavilion of the Insular Psychopathic Hospital is a 2-story concrete building 50.30 by 40 by 11.84 meters. The outside wall is of concrete and adobe stone. The floor is of concrete and the roofing of corrugated galvanized iron. The work is under contract involving the sum of ₱165,916.98. The building was 56 per cent completed at the end of the year.

PROVINCES

Of many public buildings undertaken in the provinces during the year, the most important are the following:

Tabaco Presidencia Building, Tabaco, Albay Province.—The Tabaco Presidencia Building is a reinforced-concrete 2-story building, Davao type, with outside dimensions of 12.40 by 24.80 meters. The work was undertaken by contract for ₱39,500 and completed before the end of the year. The electrical wiring installation was awarded to Mora Electric Co. for ₱1,025.

Taal Market Building, type A, Batangas Province.—The biggest market building project undertaken during the year is the construction of the Taal Market Building in Taal, Batangas. The project comprised the construction of two market buildings, both of which are of 21 by 43.5 meters, type A, and one matadero, 8.90 by 12.20 meters. The construction of these structures was undertaken by contract for ₱43,550.34 and the buildings were completed and turned over to the municipal council of Taal in September, 1929.

Kalibo Hospital, Kalibo, Capiz Province.—This is a 1-story concrete 20-bed hospital, 26 by 26 meters, with kitchen 11 by 11 meters, also of concrete. Twenty per cent of the project was completed during the previous year and during the third quarter of this year the building was completed and turned over to the health authorities.

Vigan provincial capitol, Ilocos Sur Province.—The Vigan provincial capitol is a 2-story concrete building 34.25 by 9.12 meters. The work consists of the reconstruction and remodeling of the old provincial brick building and the construction of two additional wings. The two wings are each 34.25 meters long and 20 meters wide. The construction of these two wings has been contracted for ₱98,400 to be completed within 250 calendar days. The work was begun in June and at the end of the year the building was about 55 per cent finished.

Dumangas school building, Iloilo Province.—This project consists of the construction of a bureau of education standard plan No. 10-A concrete in the municipality of Dumangas, Iloilo. The estimated cost of the project is ₱49,880, but only ₱41,891.58 was made available during the year. The work was started by administration but same had to be suspended for lack of funds after 86 per cent of the building was completed.

Leyte high school building, Tacloban, Leyte Province.—The Leyte provincial high school is of the Pasig type minus the rear wing. The work was commenced in December, 1928, by contract and was completed in July of this year. The total expenditure on this project up to the end of the year amounted to ₱126,949.60.

Vigan provincial high school, Ilocos Sur Province.—The Vigan high school 20-room building was constructed, using plan No. 20 Pasig type. The construction of the building and the installation of the electrical conduits were done by contract for ₱93,500 and ₱1,950, respectively. The building was occupied on November 11 of this year.

Bacolod provincial capitol building, Occidental Negros Province.—The Occidental Negros provincial capitol building is a 2-story concrete building 105.8 meters long by 19 meters wide. The plan for this building was especially prepared by the bureau of public works for the Province of Occidental Negros. The construction of the building was at first done by contract, but it was abandoned by the contractor during the early part of the year and the work had to be undertaken by administration. Before the end of the year the work was about 92 per cent completed and the total amount expended on the project was ₱312,387.36.

Construction of Bicol leper station.—This project consists of the construction of 1 mess hall with a floor area of 194 square meters, 2 barracks with a floor area of 116 square meters each, 1 treatment center with a floor area of 99 square meters, and 1 kitchen with a floor space of 56 square meters. The construction of these buildings was undertaken by contract for the lump sum of ₱20,090 and at the end of the year the work was about 95 per cent completed.

PORt WORKS CONSTRUCTION AND MAINTENANCE

The Advisory Board on Ports and Harbor Improvement, which was created on December 13, 1928, by Executive Order No. 144, finished its report on March 5, 1929, which was forwarded to the Governor General on the following day. In this report the board recommended a program of port development that was generally adhered to whenever possible by executive action. The activities during the year follow:

Aparri, Cagayan.—The work at Aparri, Cagayan, consisted in the construction of 224 linear meters of reinforced-concrete pile and slab jetty, by C. Russell, contractor, at cost plus 15 per cent. The extraordinarily precarious conditions prevailing at Aparri fully justified the execution of this work in this manner. The appropriation was exhausted and it is proposed to observe the effect of the completed section before attempting to construct the remaining 86 linear meters of the jetty as originally planned. Work on control of the Cagayan River at its mouth was initiated by the construction of 1,300 linear meters of palma brava pile hurdles above the town of Aparri and on the east side of the river. They functioned well, but were so damaged by the floods that it is evident better materials must be used. A total of ₱27,204 was expended on this work during the year and approximately 22 per cent of the work as originally planned was completed. The repair and continuation of the hurdles will be carried out next year as it is evident that the river must be trained to a fixed location if the channel across the bar is to be available for shipping at all seasons.

Currimao, Ilocos Norte.—With the small amount available, completion of the rock causeway was carried out. With the balance, a short marginal landing will be constructed for ships' boats and "virays."

San Ildefonso, Ilocos Sur.—Further study was made of the practicability of developing a port at this place and the legislature again affirmed its desire that this project be carried out by reappropriating the funds which had reverted while the matter was in controversy. The design of the port structures was awaiting the calyx drill borings at the close of the year.

San Esteban, Ilocos Sur.—A survey was made and preliminary study shows that an interisland port can be readily developed at this place at nominal cost.

San Fernando, La Union.—A study was made of the possibility of constructing breakwaters to protect the pier at San Fernando, but the cost would apparently be so great as to prohibit such works, in view of the limited use made of the port.

Legaspi, Albay.—A thorough resurvey was made of the proposed development of the port and extensive calyx drill borings were taken to determine the location of a coral stratum found on the south side of the proposed basin. As a result of the new conditions discovered, the diversion canal for the Tibu River was relocated and the basin greatly enlarged. Investigation was made of the ownership of property involved and the design of the breakwaters begun. The appropriation was too small to enable completion of a breakwater and advertisement was, therefore, delayed until the 1930 funds would be available.

Mauban, Tayabas.—Plans were prepared for a boat and launch landing at this port.

Laguimanoc, Tayabas.—A survey and study were made of the proposed port development, but plans were not prepared, as the future traffic would probably require only the extension of the railroad company's landing.

Baler, Tayabas.—A survey and study were made of possible port development at this isolated place, but the cost would be prohibitive, considering the character of facilities which could be obtained.

Tacloban, Leyte.—The deck of the 12 by 35 meter addition to the existing concrete wharf was completed and the fender clusters and lamp-posts finished. Piles were driven for one additional 2.5 meter panel. The total expenditures amounted to approximately ₱25,000.

Catbalogan, Samar.—The work of improvement of the existing causeway consisted of the partial completion of the replacement of the timber-pile connecting bridge with rock fill, widening and raising the top elevation of the outer 60 linear meters of the causeway and extending the "L" which protects the launch anchorage. A contract calling for about 10,000 tons of rock for this purpose was let and 31 per cent of the work completed, the expenditures and obligations totaling approximately ₱61,000. Further improvement will consist of grouting the exposed face of the causeway, providing small boat landings and the construction of a concrete pierhead.

Calbayog, Samar.—The construction of the east jetty was advertised for bids, but the only one received was deemed excessive and the work was ordered readvertised. The second advertisement resulted in the receipt of only one bid, action upon which had not been accomplished at the end of the year.

Loay, Bohol.—Reconstruction of the channel markers was carried out, but no bids were received for furnishing the 400 cubic meters of rock needed to complete the jetties. This small item and a limited amount of dredging will be done by administration.

Tagbilaran, Bohol.—A small amount of improvement work was done in the form of widening a short section of the causeway leading to the wharf. With increasing traffic, it will be necessary to carry this work through at an early date and to provide turning and parking space for motor vehicles near the wharf.

Cebu, Cebu.—Improvement of the port of Cebu was carried on throughout the year. The Atlantic, Gulf & Pacific Co. made very satisfactory progress on the marginal wharf and Pier No. 1. The former was approximately 40 per cent completed and the latter 100 per cent completed at the end of the year. The pier shed was not included in this contract and will be advertised under a separate proposal. Plans were prepared for a steel sheet-pile retaining wall in back of the old marginal wharf near Fort San Pedro in order that dredging for a 30-foot berth may be safely done. The work was advertised prior to the end of the year. It is proposed to complete the filling behind the new marginal wharf and to advertise early next year for the construction of another pier and the two pier sheds. It is also proposed to advertise for bids for the dredging of a portion of the fairway and berths.

Dumaguete, Oriental Negros.—With an expenditure of ₱9,151, a concrete crib-work was installed to retain the rock fill at the outer end of the causeway, where damage had been done by the waves from the southeast. The causeway road was also greatly improved by the application of an asphalt surface treatment.

Pulupandan, Occidental Negros.—The creosoted timber sea-wall and reclamation were completed, and, by agreement, the proposed breakwater was eliminated. No further improvement at this port is contemplated for the present.

Iloilo, Iloilo.—Very good progress has been made on the Iloilo port works projects. The contract for the marginal wharf became effective July 25, 1929, Tan C. Tee & Co. being the constructors. By the end of the year, approximately 34.6 per cent of the job was completed and it is probable that the wharf will be in service well before the expiration of the contract time. The contract price totals approximately ₱1,000,000.

Dredging has been carried on steadily since March 4 and more than 300,000 cubic meters of spoil were excavated from the lower beach of the Iloilo River and deposited in the proposed airport reclamation. The unit cost was ₱0.30 per cubic meter and the work was done by dredge No. 4, a 16-inch hydraulic machine. Approximately 160,000 cubic meters will be needed to complete the airport site. The Visayan Stevedore Transportation Co. continued work on their contract for the construction of the rock-fill spur dikes and jetty extension. Of a total estimated required amount of 40,000 metric tons, nearly 23,500 had been placed by the end of the year. Work was suspended during the adverse monsoon. The spur dikes have proven very effective.

Capiz, Capiz.—Construction of the south breakwater was continued by contractor Gregorio Yotoko, the work starting in March. Over 100 linear meters

were completed during the year and the south breakwater was approximately 95 per cent completed as of December 31.

Construction of the north breakwater was carried on by administration, 100 linear meters being completed and 50 linear meters were 70 per cent completed during 1929, making the north breakwater about 88 per cent completed at the end of the year.

Iligan, Lanao.—Satisfactory progress was made on the construction of the concrete pier by administration. Approximately 45 per cent of the pier was finished, except for the asphalt pavement. The work will be continued with the ₱25,000 appropriated for 1930.

Cagayan, Misamis.—Plans were prepared for the extension of the existing concrete wharf and the replacement of the short wooden approach by rock fill. The latter was completed, but the advertisement of the extension was withheld so that the work could be planned to include the 1930 appropriation and thereby make the project sufficiently attractive to interest contractors.

Jimenez, Misamis.—A survey was made of the proposed site for overseas port development.

Dapitan (Pulanan Point) Zamboanga.—A survey and tentative design and estimate were made of the proposed pier for coastwise service on Dapitan Bay, at Pulanan Point. The project appears to be practicable, both physically and financially, and will fill a very great need of this region.

Zamboanga, Zamboanga.—The work at this port consisted in the replacement of one-half of the wooden approach with concrete construction. The approach is 163 meters long and approximately 11 meters wide. The half width was completed and opened to traffic in October. With the funds made available in 1930, it is hoped to complete the reconstruction of the approach, as repair of the temporary structure is not only expensive but greatly inconveniences traffic. A survey was also made to secure data upon which to base the development of this port.

Cotabato, Cotabato.—The only work done on the river wall consisted in the placing of two mooring bitts and back filling. Work was then suspended for lack of funds.

Parang and Polloc, Cotabato.—Surveys were made to determine the feasibility of developing a port at either of those adjacent places, and it was found that Polloc is not a practicable location. A preliminary study was made of the character of works required at Parang, which seems to be the best site available.

Glan, Cotabato.—A survey was made and a preliminary layout prepared for a wharf at this isolated place, together with a tentative estimate. It will be feasible to provide adequate facilities at this port, at a nominal figure, to take care of the interisland vessels that would call if a wharf were available.

Davao, Davao.—The rock-fill causeway to replace the wooden approach to the completed concrete pier was 67 per cent completed at the end of December, 1929. The work is being done by the Luzon Stevedoring Co. under contract. At Mati and Sta. Pilomena, Davao, small temporary landings were improved at provincial expense. A careful investigation was made of the possibility of developing a port at Pakiputan Straits, to serve the town of Davao and replace Sta. Ana, the present port. In view of the swift currents and the great expense of constructing satisfactory deep berths, it was decided that the development should continue at Davao (Sta. Ana).

Jolo, Sulu.—After a long period of preparation of materials, due to limited annual appropriations, actual construction of the improvement of the approach to the existing pier was started in June. The amount available was insufficient to interest contractors, and the work is being done by administration. The project comprises the construction of a gravity concrete retaining wall, on a pile foundation, and the reclaiming of the area between it and the present approach. The cost of the wall is estimated at about ₱80,000 and the appropriation available will suffice for about 25 per cent of the work. This improvement will greatly relieve present traffic congestion on the wharf approach.

Siasi, Bongao, Tandu Batu, and Cagayan de Sulu, Sulu Province.—The landings at these places were repaired and some improvement was made at the two last named, where the approach causeways were widened.

Butuan, Agusan.—Plans were prepared for a short extension of the existing wharf, to enable launches and small vessels to dock at any stage of the river. The improvement was waiting funds at the close of the year.

PORT WORKS AND DREDGING AT MANILA

The operation of dredging and floating equipment continued in charge of Mr. Vicente Castillo, superintendent of dredges. Advertisement for bids have been placed by the bureau of supply for a dredge to conform to the following specifications:

Hopper capacity: 600 cubic meters of sand or similar material.

Draft: Completely equipped, loaded to capacity with dredge spoil, fuel, and water, not over 16 feet (4.87 meters).

Mean speed: Full load, smooth water, 10 knots.

Maximum dredging depth: 45 feet (13.71 meters).

Material: Steel.

Class: Lloyd's 100-A 4K (dredger).

Steering gear: Steam.

The vessel shall be fully equipped with necessary steam windlasses and complete electric-light plant.

This dredge is very urgently needed as the steamship *Dredger* is unable to maintain the required minimum depth of 30 feet in the fairway in front of Pier 7 to say nothing of attempting to dredge the south harbor which is at present badly silted up. Sufficient equipment should be provided to not only maintain a minimum depth of 40 feet around Pier 7 and in the fairway but also to dredge all of the south harbor inside of the breakwater to a minimum depth of at least 35 feet.

PIERS, CARGO SHED, BREAKWATER, AND RIVER WALL MAINTENANCE

Mr. Prudencio Baza continued in charge of this work, which comprises principally the upkeep of the piers and the making of miscellaneous alterations and improvements to the port structures. In addition to the ₱100,000 appropriated for the maintenance of insular piers, cargo sheds, and breakwater, it was found necessary, due to deterioration of the floors of Piers 3 and 5, to devote ₱255,000 from the bond issue funds for replacing same and for the installation of pier heads.

IRRIGATION SYSTEMS

There were 16 irrigation systems in operation, 3 irrigation projects under construction, and 65 under consideration.

Irrigation systems in operation.—The 16 government irrigation systems in operation including the extensions which have been completed from time to time, cover an aggregate area of 66,621 hectares, and were completed at a cost of ₱12,359,369, excluding the cost of operation and maintenance during the first year following the opening of the system.

Of the 16 government irrigation systems in operation, only 12 were administered by the bureau of public works. The Naic system was operated by the bureau of lands, the Trinidad by the bureau of education, and the Santa Maria and Ayala systems by the municipal council of Samboanga.

Two systems suffered damage from storms and high water during the year, namely: The Angat system in Bulacan Province and the Sibalom-San José system in Antique Province.

The damage to the Angat system in September consisted of portions of the protective dikes on the north and south banks of the river being washed out with a consequent damage to canals and structures in the immediate vicinity. The total damage to the canal system was estimated at ₱12,000. This flood was the highest ever recorded on the Angat River. The crops in the immediate vicinity of the breaks in the dikes were damaged by silt and debris.

A flood occurring on November 10 and 11 in the Tipuluan River, Antique Province, caused the damage to the river control works maintained by the Sibalom San Jose project. The river shifted its channel about 1 kilometer away from the headworks of the system. The necessary work to bring the river back to its former channel and to provide spur dikes to maintain the river in its old channel is estimated to cost ₱9,500.

Excluding the Baruyen project, the operation of the remaining completed government systems has been fairly satisfactory as a whole. The latest reports indicate that the production during the year under discussion will exceed the production for 1928. However, it is doubtful whether the financial returns of the farmers will show any improvement, due to other factors that have arisen to adversely affect the market price of palay in the principal growing regions.

Act 3523 became effective on February 21, 1929, and according to the provisions of this act, the irrigation charges have been revised on all projects except the

Pilar and Talavera projects to which this act does not apply. Briefly stated, this act provided for the choice of a maximum charge, up to ₱12 per hectare, under the annual assessment plan. The plan to be followed depended on the choice of the landowners, said choice to be determined as provided for in said act.

The new charges were duly advertised by irrigation notices and the final dates for expressing a choice expired on November 14, 1929.

Act 3523 provided for penalties on delinquent payment of irrigation charges which should materially improve the collections hereafter.

A readjustment of the charges according to act 3523 has resulted in an improved showing relative to collections and it is confidently expected that collections will become less difficult and higher in quantity hereafter due to the provisions of this act. The amount collected at the end of the year was 61 per cent of the total amount collectible.

Numerous farm ditches and minor structures were completed during the year on all projects and the delivery of water was greatly improved thereby. However, much remains to be done in this respect as landowners are usually very reluctant to construct or cooperate in the construction of farm ditches and great patience and tact are required to solve this problem satisfactorily. The physical maintenance of canals is not entirely satisfactory due to various reasons, but efforts are being made to improve this phase of the operation work.

Projects under construction.—The three systems under construction cover an aggregate area of 25,000 hectares and are estimated to cost ₱6,210,935.

The Penaranda River irrigation project in Nueva Ecija and Bulacan Provinces was 85 per cent completed at the end of 1929. The diversion works under contract with Mr. F. T. Ryan were completed in June, 1929, at a total cost of ₱660,000. The large canal structures were completed during 1928. The excavation of the main canal undertaken by subcontractors Gordon and Haley Construction Co. and that of laterals and sublaterals by Mr. Sotero Baluyot progressed satisfactorily during the year. Contract for the construction of sublateral headgates, turnouts, and other small canal structures was entered into with Mr. S. Nagauye on August 21, 1929. In view of the progress made in construction work, it is expected that the project will be completed in time to deliver water by May and will place under irrigation, for the first time, approximately 12,000 hectares of land.

It is not known when the Laoag-Vintar irrigation project in Ilocos Norte can be completed, due to certain questions yet to be solved. The south side system was, however, in operation since October 15, 1928, serving approximately 3,000 hectares of land. An allotment of ₱30,000 was made on May 5, 1929, to cover an overdraft and the operation and maintenance expenses of the system during the past year.

Work on the Dipolog irrigation project in Zamboanga Province was confined to the maintenance of completed canals and structures. Construction work was suspended on account of lack of funds. The construction of a complete drainage system was carefully studied with a view to assuring the success of the project.

WATER RIGHTS

There were received during the year a total of 255 new applications for water rights, 241 of which are for irrigation and 14 for power development purposes. A total of 237 applications were finally acted upon, 193 of which were granted and 44 disapproved by this department, upon the recommendation of the irrigation council. The water rights granted for irrigation purposes were based on irrigating 15,451.4527 hectares of land.

There are 14 applications for the development of power filed during the year 1929. Five applications for power development were approved for developing a maximum of 6,711 horsepower.

There are three stream which have been designated for adjudication of water rights during the year 1929.

Adjudication on four streams (Banila, Andulan, Parasapas, and Bued or Nantayangan Rivers and their tributaries) have been completed in 1929, making a total number of streams so adjudicated 34.

The irrigation council met three times during the year 1929 and acted upon a total of 237 water-right applications and two rules and regulations of irrigators' association.

There are 3,213 certificates of apportionment of water according to priority which have been issued and about 5,000 certificates are still pending.

RIVER CONTROL PROJECTS

There were 14 river control projects during 1929 for which funds were made available. Plans and specifications for 10 of these projects were prepared by the division (irrigation, B. P. W.) and construction work was undertaken by district engineers. These projects are enumerated heretunder:

Name	Province	Municipality	Estimated cost	Type of work	Remarks
1. Gamut River control.....	Albay.....	Oas.....	15,000	Channel, improvement, and earth	Relief fund. Under construction.
2. Pagsanjan River control.....	do.....	Pandan.....	8,000	dike and permeable dike,	Do.
3. Calacan River control.....	do.....	Liton.....	20,000	Dike and channel improvement.....	Appropriation act. Under construction.
4. Angat Dike.....	do.....	Quingua.....	20,000	Dike extension and repair.....	Do.
5. Argao River control.....	Bulacan.....	Argao.....	9,000	Earth dike.	Do.
6. Carcar Dike.....	Cebu.....	Carcar.....	27,000	Bamboo revetment and cut-off channel	Relief fund. Under construction.
7. San Isidro River improvement.....	do.....	San Fernando.....	5,000	Dike and cut-off channel	Appropriation act. Pending construction.
8. Boac River bank revetment.....	Marindique.....	Boac.....	10,000	Channel improvement.....	Relief fund. Under construction.
9. Magat River control.....	Nueva Vizcaya.....	Bayombong.....	15,000	Repair bank revetment and permeable	Do.
10. Pampanga River Dike.....	Pampanga.....	(San Simon, Arayat San Luis, Apalit), Galarin, Uribitondo.	25,000	Bamboo revetment and permeable	Funds from bureau of non-Christian
11. Agio River control.....	Pangasinan.....	Bayambang.....	50,000	Earth dike maintenance.....	tribes, completed.
12. Bayambang Dike.....	do.....	Romblon.....	100,000	Earth dike and maintenance.....	Appropriation act.
13. Casalugan River control.....	Romblon.....	Sorsogon.....	10,000	Earth dike and bank revetment.....	Under construction.
14. Cadacan River control.....	do.....	Sorsogon.....	10,000	Channel improvement and concrete	Relief fund. Under construction.
				Channnel improvement.....	Relief fund. Completed.

The bureau of public works prepared plans and specifications for 27 provincial and municipal waterworks projects on which construction work was started during 1929. These projects will furnish potable water to a population of 59,880 at an estimated cost of ₱723,000. Preliminary designs and estimates of cost were also made for 30 provincial and municipal waterworks projects, most of which are to be financed from loans. These projects will supply 94,400 people at an estimated cost of ₱1,727,800.

Construction work was completed by district engineers on 24 waterworks projects including four extensions and two improvements, started during previous years, leaving 78 projects under construction at the end of the year. The completed projects cost ₱570,319.23 and serve a total population of 64,725 while the 78 projects still under way are estimated to cost ₱6,186,700 and will provide a potable water supply for 351,110 people. The pipe and other materials required for the 27 waterworks projects on which construction was started were imported from the United States and Europe during the latter part of the year.

There are 117 waterworks projects under consideration which contemplate furnishing water to a total population of 387,800 and are estimated to cost approximately ₱7,039,400. As soon as the municipalities concerned are able to finance these projects, construction work will be undertaken, excepting on few projects which require further investigations.

There have been completed thus far 196 municipal and provincial water supply systems and eight extensions in the Philippine Islands, excluding the Manila metropolitan water system, which furnish potable water to a total population of 642,377 and have cost ₱7,277,217.10.

SEWERAGE SYSTEMS

The construction of the Vigan domestic sewerage system, Ilocos Sur, was reported 97 per cent complete at the end of the year. This project is estimated to cost ₱110,000. The work is being financed from the proceeds of a bond issue by the municipality of Vigan. The construction of the Lucena storm drain system, Tayabas, was reported 96 per cent complete at the end of the year. This project is estimated to cost ₱150,000.

Preliminary plans and estimates of cost have been prepared for the following projects:

1. Batangas domestic sewer system, Batangas Province.....	₱95,000
2. Cavite domestic sewer system, Cavite Province.....	95,000
3. Cavite storm drain system, Cavite Province.....	80,000
4. Cebu domestic sewer system, Cebu Province.....	440,000
5. Lucena domestic sewer system, Tayabas Province.....	120,000
6. Zamboanga domestic sewer system, Zamboanga Province.....	130,000
 Total.....	 980,000

ARTESIAN WELLS

Ninety-one public artesian wells were completed during 1929, 82 of which were successful and 9 unsuccessful.

In addition to the above, the bureau also drilled one private well for the Insular Lumber Co. at Barrio Fabrica, Sagay, Occidental Negros, at the expense of the company.

Successful artesian wells drilled by the bureau from 1904 to 1929 numbered 2,117, costing ₱5,033,303.68. Private wells drilled from 1904 to 1923 were included in the above figure. All these wells together are capable of supplying a total of 52,042,900 gallons of potable water per 12-hour day which, at the rate of 20 gallons per capita, would supply no less than 2,602,145 people.

An amount of ₱4,000 from the 1929 artesian wells appropriation of ₱200,000 was allotted to the bureau of science for the purpose of making geological surveys and investigations to determine the success of drilling wells in doubtful places and where a large percentage of unsuccessful wells have been drilled.

BUREAU OF PUBLIC WORKS MACHINE SHOP

The activities of the bureau of public works machine shops for the years 1928 and 1929 may be summed up as follows:

Year	Number of personnel	Work orders completed	Cost of materials	Cost of labor	Total value of works
1928.....	76	1,026	₱51,606.70	₱52,055.07	₱103,661.77
1929.....	79	955	41,541.24	52,827.59	94,368.83

LOS BANOS QUARRY

This quarry was very successfully operated under the charge of Mr. José Tiosejo, machinery inspector. The following table shows results obtained:

Financial statement of Los Banos quarry, December 31, 1929

Total cubic meters sold during 1929.....	48,454
Total income during the year.....	₱138,677.47
Total expenditures including purchase of equipment and construction.....	₱117,800.00
Less cost of capital outlay.....	9,000.00
	108,800.00
Gross profit.....	29,877.47
Less depreciation based on ₱44,000 value of fixed assets at 20 per cent.....	8,800.00
Net operating profit.....	21,077.47

REGISTRATION AND REGULATION OF MOTOR VEHICLES

There were 4,938 motor vehicles newly registered and 27,342 reregistered for operation, or a total of 32,280 motor vehicles, as compared with 30,046 registered during 1928. There were also 2,704 motor vehicles registered for storage. During the year 18,315 applicants for drivers' licenses were examined and 4,965 new licenses issued. Including renewals, 52,921 operators of motor vehicles were licensed.

The following is a comparative tabulation of motor vehicles registered and classified during the years 1928 and 1929:

	1928	1929
Automobiles.....	19,791	21,341
Motor trucks.....	9,552	10,365
Motor cycles.....	703	574
Total.....	30,046	32,280

The campaign for the apprehension of violators of the motor vehicle law was carried out vigorously through the aid of the constabulary traffic officers with the result that there were 3,717 licenses suspended and 247 revoked, as compared with 3,326 licenses suspended and 222 revoked during 1928.

Statistics on motor-vehicle law enforcement

	Total number of cases reported		Cases for reckless driving		Cases for speeding	
	1928	1929	Number	Per cent	Number	Per cent
First quarter.....	2,717	1,782	292	16.38	222	12.41
Second quarter.....	1,636	2,651	476	17.9	319	12
Third quarter.....	1,672	2,026	383	18.9	371	18.3
Fourth quarter.....	2,478	2,931	455	15.5	529	18
Total.....	8,503	9,390	1,806	17.1	1,441	15.3

	1928	1929
Number of deaths caused by automobile accidents reported during the year.....	32	50
Number of licenses suspended during the year.....	3,326	3,717
Number of licenses revoked during the year.....	222	247
Amount of fines in violation of automobile law.....	₱20,972	₱25,583

Provisions of the automobile law (act 3045) commonly violated

	1928	1929
Section 20. Overloading.....	1,957	1,848
Section 26 (b). Reckless driving.....	1,163	1,606
Section 26 (a). Speeding.....	1,164	1,441
Section 2 (a). Colorum.....	395	653
Section 34. Light.....	599	500
Section 14 (h). Driving without license.....	536	235

COLLECTIONS AND EXPENDITURES

The following tabulation shows the yearly amount of funds collected and expended for the registration and regulation of motor vehicles for the last five years:

Year	Collections	Expenditures
1925.....	₱798,438.62	₱63,025.50
1926.....	955,061.28	62,555.55
1927.....	1,145,369.34	83,040.00
1928.....	1,254,684.81	88,540.00
1929.....	1,341,364.17	154,500.00

BUREAU OF POSTS**ORGANIZATION AND PERSONNEL**

Number of offices.—There were in operation at the close of the year 974 post offices (excluding 4 post-telegraph branch stations in Manila), 608 money-order offices, 973 postal savings banks, 477 telegraph stations (including 40 regular radio stations and 18 radio stations used exclusively for relay purposes), which yield an increase of 10 post offices, 16 money-order offices, 12 postal savings banks, and 15 telegraph stations (including 12 radio stations) over the corresponding figures of the year preceding.

Number of employees.—Exclusive of mail contractors and mail messengers, the force of officers and employees of the bureau at the close of the year numbered 4,053, or 288 more than the figure of a year ago. This increase was made necessary by the establishment of new post-telegraph offices and radio stations, the employment of 18 radio operators in different private companies having radio stations operated as bureau of posts' stations, and the appointment of 81 postal agents taking charge of the hand-out service in different places of the islands having no regular free-delivery service.

There were 689 mail contractors and mail messengers, 23 more than last year, to take care of the newly established mail routes and certain improvements in the service.

FINANCIAL STATEMENT

The total receipts of the bureau amounted to ₩4,394,917.96, or an increase of ₩47,749.24, or 1 per cent over the 1928 revenue, which was ₩4,347,168.72.

There was an increase of ₩82,730.78 from the sale of postage stamps, which was attributable to the greater volume of transaction handled as evidenced by increased registry business, bigger number of packages sent abroad, and the establishment of 11 new post offices. Miscellaneous postal receipts, which included indemnity fees, C. O. D. postage, postage on first and second class matter under permits, and postage due stamps, also registered an increase of ₩25,193.20.

The money order fees yielded an increases of ₩22,067.25, while the interests received on investments and securities of the postal savings bank gave an increase of ₩245,330.34. But there was a decrease of ₩401,290.14 in telegraph tolls, which was due to the transfer to the Radio Corporation of the Philippines of the traffic between Manila, Iloilo, Cebu, Cagayan, Misamis, Tacloban, Zamboanga, Davao, Aparri, and Laoag, and a part of the relay traffic of these places.

While the total income was bigger, the expenditures which amounted to ₩3,578,419.66, were ₩72,274.71, or 2 per cent less than those of the previous year. Among the factors which contributed to this decrease in expenditures were

the rigid economy exercised in the consumption of supplies and materials and the requirement of the bureau of audits to charge all expenses in connection with the maintenance of the cable ship *Bustamante* to the special appropriation act instead of to the general appropriation act. There was an increase of ₱28,114.77 in the expenditures on freight, express, and delivery service due to the extension of old mail routes and the establishment of additional ones.

POSTAL BUSINESS

Registered mail.—A total of 2,016,385 registered articles were accepted and 2,123,747 received for delivery, an increase of 74,383 and 373,169 pieces over the corresponding figures of 1928.

A comparative statement of the volume of registered mail accepted for registration during the last five years follows:

Year	Articles	Increase or decrease (-)	Percentage
1925-----	1,647,172	103,923	6.7
1926-----	2,247,548	600,376	36
1927-----	1,622,811	-624,737	-27
1928-----	1,942,002	319,191	20
1929-----	2,016,385	74,383	4

Insured registered mail.—There were handled 32,875 insured registered articles, valued at ₱601,383.63, on which indemnity fees amounting to ₱6,330.24 were collected. Compared with the corresponding figures for 1928, there was a decrease of 7,187 pieces, or 17 per cent, in the number of articles handled; a decrease of ₱225,548.42, or about 27 per cent, in the aggregate value of the articles; and a decrease of ₱4,084.76, or 39 per cent, in the amount of fees paid. This decrease is due primarily to the increased number of money-order offices and patrons availed themselves of the money-order system in remitting funds from one place to another, instead of the indemnity system.

Domestic collect-on-delivery service.—There were posted 127,252 C. O. D. parcels, an increase of 10,526 over the number for 1928. The commission (exclusive of registration fee and postage) collected on these parcels amounted to ₱32,019.51, as against ₱29,692.43 for the previous year, an increase of ₱2,327.08.

The total collections amounted to ₱1,586,672.87, as compared with ₱1,594,924.41 in 1928, or a decrease of ₱8,251.54.

Exchange of mails with Philippine offices.—The Manila post office received 33,220 mails from Philippine offices as against 33,728 for 1928, a decrease of 508 mails. The number of pouches of letters received, however, increased from 41,513 in 1928 to 42,386, an increase of 873 pouches. The number of sacks of mail increased from 17,022 in 1928 to 19,076, a difference of 2,054 sacks of mail.

Dispatches increased from 33,693 in 1928 to 33,952, a difference of 259 dispatches. The number of pouches dispatched decreased from 49,462 in 1928 to 48,436, a difference of 1,026 pouches. On the other hand, the number of sacks dispatched increased from 149,466 in 1928 to 162,193, a difference of 12,727 sacks.

Mails handled in railway post offices.—The volume of mails handled by railway post offices during the years 1928 and 1929 follows:

	1928	1929	Increase	
			Number	Per cent
Pouches received-----	116,985	134,677	17,692	15 $\frac{1}{2}$ 5
Sacks received-----	131,070	148,256	17,186	13 $\frac{1}{2}$ 0
Letter packages received-----	309,677	402,589	92,912	30
Registers received-----	310,942	372,171	61,229	19 $\frac{1}{2}$ 0
Special-delivery articles-----	83,819	162,735	78,916	94 $\frac{1}{2}$ 0

Exchange of mails with the United States.—There were 214 dispatches of mails received from the United States, bringing 3,098 pouches of letters, 2,254 pouches sacks, and cases of registers, and 74,269 sacks and cases of merchandise and printed matter.

Mails dispatched from the Philippines to the United States numbered 185 and consisted of 1,307 pouches of letters, 516 pouches of registers, and 20,784 sacks of registers.

A total of 102,939 insured parcels were received from the United States and possessions, exceeding the number received in 1928 by 2,523 parcels.

Exchange of mails with foreign countries.—A total of 16,953 international parcel post articles were received, 10,458 from oriental and 6,495 from European countries. The numbers for 1928 were 10,351 and 5,332, respectively.

This administration dispatched parcels to foreign countries for the last two years as follows:

	1928		1929	
	Ordinary	Regis- tered	Ordinary	Regis- tered
To oriental countries.....	3,754	3,628	4,494	3,786
To European countries.....	2,878	713	2,167	586
Total.....	6,632	4,341	6,661	4,322

There were 654 mail dispatches to foreign countries, consisting of 8,254 bags, as against 622 dispatches consisting of 7,905 bags for 1928, an increase of 32 in the number of dispatches, and 349 in the number of bags sent. This service received 575 dispatches of mails consisting of 17,463 bags which, compared with the figures for 1928, show an increase of 51 in the number of dispatches received and 2,229 in the number of bags.

First-class and third-class matter under permit.—At the close of the year 55 firms and government offices were holding permits to mail first-class matter without postage stamps affixed, as against 42 in 1928, or an increase of 13 permits. The amount collected on first-class permits was ₱28,953.88, as against ₱23,339.92 in 1928, or an increase of ₱5,613.96.

At the same date 124 commercial firms were holding permits to mail third-class matter without postage stamps affixed, as against 105 during the previous year, or an increase of 19 permits. The amount collected on third-class permits was ₱20,492.34, as against ₱17,979.81 in 1928, an increase of ₱2,512.53.

Second-class matter.—At the opening of the year, there were 172 publications registered as second-class mail matter, 22 of which were discontinued during the year.

With the admission of 30 new publications, there were at the close of the year 180 publications enjoying the second-class privilege, 106 having their offices in Manila and the remaining 74 in the Provinces.

The increase in the number of publications entered as second-class matter was steady during the last five years as follows:

Year	Number	Increase	Percentage
1925.....	142	11	8.4
1926.....	148	6	4.2
1927.....	165	17	11.0
1928.....	172	7	4.3
1929.....	180	8	11.0

Postage collected on second-class matter during the year amounted to ₱85,290.87, as against ₱72,676.65 in 1928, an increase of ₱12,614.22.

The total number of copies of second-class publications mailed during the year was approximately 56,218,000, or an average of four copies to each inhabitant. Compared with the number of the preceding year, there was an increase of 9,687,136 copies, or almost 20 per cent.

MONEY-ORDER SERVICE

Direct exchanges of money orders exist between the Philippines and the United States, Hong Kong, Australia, Japan, British North Borneo, Macao, Germany, Netherlands, Indies, Timor, and Siam.

Money-order transactions, domestic and foreign, continued to increase in volume and value.

During the year, 1,350,998 money orders were issued as compared with 1,251,217 in 1928, an increase of 99,781 or 8 per cent, with a total value of ₱59,743,719.04 as against ₱56,570,490.30 for the previous year, an increase of ₱3,173,228.74 or 5.5 per cent. The fees received for these orders amounted to ₱338,074.80 as against ₱317,438.96 in the previous year, an increase of ₱20,635.84 or 6 per cent.

The total number of domestic and foreign money orders paid and repaid in this service was 1,355,532 as against 1,249,126 in 1928, an increase of 106,406 or 8.5 per cent, with an aggregate value of ₱71,234,771.20 as compared with ₱66,326,398.64 in the previous year, an increase of ₱4,908,372.56 or 7 per cent.

A total of 1,269,745 money orders, with an aggregate value of ₱57,977,464.28, was issued payable in the Philippine Islands, as against 1,178,064 money orders amounting to ₱54,901,442.58 for the previous year. This shows an increase of 91,681 (8 per cent) in volume and ₱3,076,021.70 (6 per cent) in value. In lieu of the original money orders which were lost, 3,219 duplicates were issued, as against 3,092 for the previous year, an increase of 127, or 4 per cent.

There was an increase of ₱97,207.04, or 5 per cent, in the value of orders issued payable outside of the Philippine Islands, which amounted to ₱1,766,254.76, as against ₱1,669,047.72 for the previous year. The value of United States and foreign money orders paid in the Philippine Islands registered an increase of ₱1,119,524.10, or 9 per cent over the previous year, the aggregate amount paid being ₱12,701,387.82 as compared with ₱11,581,863.72 for 1928. Of this amount, the sum of ₱6,634,099.88, a decrease of ₱23,953.60 (0.34 per cent), as compared with ₱6,658,053.48 of the previous year, represented the value of the money orders from the Territory of Hawaii alone. The large amount of money orders issued in the United States and its possessions paid in this service is due to remittance to their families in the Philippines by money orders of the number of Filipino laborers who have emigrated to the United States and its insular possessions, principally to the Territory of Hawaii, from which more than one-half of the foreign money orders paid in this service originated. At the close of the year the balance of the exchange of money orders with the United States and its possessions and other foreign countries was in favor of the Philippine Islands in the sum of ₱10,935,133.06.

In the money-order transactions with the United States and its possessions, the balances due the Philippine Islands in the past averaged around \$1,000,000 United States currency for each quarter. In previous years settlement of these balances was greatly delayed, to our prejudice. To remedy the situation a new arrangement has been recently concluded with the United States Postal Department, whereby settlement would be greatly expedited. The result has been gratifying, for while the unsettled balance for each quarter ranged in amount from \$500,000 to over \$1,000,000 before the arrangement (on December 31, 1928, the balance was \$1,405,612.53), the statement of the insular auditor, dated December 2, 1929, for the quarter ended September 30, 1929, showed an unpaid balance of \$27,449.96 only.

Telegraphic transfer service.—As in the case of the money order, the telegraphic transfer business during the year registered increase both in volume and in value. The total number of transfers issued was 83,129, as against 79,228 for the previous year, an increase of 3,901, or 4.9 per cent. The aggregate value of these transfers was ₱13,977,741.90, as against ₱13,641,999.66 for the previous year, an increase of ₱335,742.24, or 2.4 per cent. The fees thereof amounted to ₱64,491.68, as against ₱62,745.89 for the previous year, an increase of ₱1,745.79, or 2.7 per cent. (The fees do not include the costs of the telegraphic transfer messages, the tolls on which are taken up as revenues derived from telegrams filed and transmitted.)

The total number of transfers paid was 82,746, as against 78,533 for the previous year, an increase of 4,213, or 5 per cent. The aggregate value of these transfers was ₱13,983,116.43, as against ₱13,633,927.09 for the previous year, an increase of ₱349,189.34, or 2.5 per cent.

POSTAL SAVINGS BANK

There were at the close of the year 325,228 depositors, with deposits amounting to ₱8,695,071.46, an increase over the previous year of 36,083 depositors, or 12 per cent, and ₱602,555.33, or 7 per cent, in the amount of deposits.

The total income amounted to ₱733,609.87, an increase of ₱229,488.65, or 45 per cent over that of the previous year. The cost of administration was ₱126,618.93, as against ₱119,661.95 of the previous year, an increase of ₱6,956.98, or 5 per cent. This slight increase is due to the salary paid to additional force employed to cope with the increased business of the bank and the cost of operation of the 11 additional bank offices established during the year. The net earnings amounted to ₱344,738.11, showing an increase of ₱203,108.13, or 143 per cent.

Investment.—The funds of the Postal Savings Bank were invested as follows:

Classification	1928	1929	Increase
Bonds:			
Philippine Railway Co.	₱505,000.00	₱505,000.00	None.
Manila Railroad Co.	323,875.50	323,875.50	None.
City of Manila	460,000.00	460,000.00	None.
Fixed assets: Foreclosed mortgages	88,388.62	99,779.96	₱11,391.34
Other investments:			
Real-estate loans	4,023,850.93	4,648,705.20	624,854.27
Provincial and municipal loans	1,974,674.00	2,748,260.00	773,586.00
Total of bank investments	7,375,789.05	8,785,620.66	1,409,831.61

The surplus funds are deposited in the Philippine National Bank at an interest of 4½ per cent per annum. The total sum on deposit so far amounts to ₱2,276,421.48, of which ₱1,745,000 represent the capital deposited, and ₱531,421.48 the interest earned since April, 1925. The total deposit made during the year under review amounted to ₱99,621.42, which consisted of earned interest only.

MAIL TRANSPORTATION AND DELIVERY SERVICE

Transportation by railroad.—Mail was transported over a distance of 1,820,499 kilometers of the lines of the Manila Railroad Co. and the Philippine Railway Co. at a cost of ₱140,266.78, a decrease of 46,767.8 kilometers, or 2½ per cent, and an increase in cost of ₱7,638.52, or 5¾ per cent. The decrease in kilometrage was brought about by the occurrence of interruptions on some lines and the discontinuance of train service in certain routes. The average rate of compensation per kilometer was ₱0.07704, as against ₱0.0710 of the previous year, or an increase of ₱0.00604 or 8½ per cent.

Transportation of mail by railway was interrupted due to the typhoon of September, affecting seriously the northern and southern lines. In the northern line the interruption lasted for about three weeks. Mails, although delayed, were, however, moved by means of automobiles and trucks. On the southern line the interruption lasted for over a week, and in the Legaspi division it lasted from September 3 to October 31. Motor boats were used to carry Manila mails from Naga to Pamplona for connection with boats going direct to Manila, or by combined boat and train service. About the end of September regular train service between Naga and Pamplona was restored, but the interruption on the Legaspi-Tobaco Line lasted till the end of October.

Transportation by electric cars.—In Manila a portion of the mail was carried over 33,282.8 kilometers of the Manila Electric Co.'s line as against 33,334.17 kilometers for the year 1928, a decrease of 51.37 kilometers. The cost of this service amounted to ₱1,095.47 as compared with ₱1,094.38 for the preceding year, an increase of ₱1.09.

Transportation of mails by boats.—Every opportunity was taken advantage of, and no effort spared, in making mail connections by indirect boats and those having no fixed schedules, thereby advancing mails to certain points in the islands.

Mail routes.—There were 704 routes in operation as against 682 of the preceding year, an increase of 22 routes, or 3½ per cent. Of these routes 406 are between post offices; 288 between post offices and mail boats and mail trains. Ten mail routes between post offices are operated at the expense of the municipalities concerned.

TELEGRAPH AND RADIO

Total volume of telegraph business handled.—There were received for transmission 990,231 messages. This does not include those filed at Laoag, Aparri, Manila, Tacloban, Cebu, Iloilo, Cagayan de Misamis, Zamboanga, and Davao which were transferred to the Radio Corporation of the Philippines, nor those filed by the public directly with the stations of the corporation.

Telegraph receipts and expenditures.—The total revenue from this source, consisting of telegraph tolls amounting to ₱913,569.16 and of miscellaneous receipts amounting to ₱18,029.38, was ₱931,598.54, as against ₱1,333,699.60 for the previous year. There was, therefore, a decrease of ₱402,101.06, or 30.1 per cent, which was entirely due to the transfer of traffic between certain points of the islands to the Radio Corporation of the Philippines.

The total expenditures, which consisted of ₱1,048,369.89 charged to general appropriations and of ₱141,761.98 charged to special public works fund, amounted to ₱1,190,131.87, as against ₱1,365,248.37 for the previous year including ₱171,980.22 charged to special public works fund. There was, therefore, a decrease of ₱175,116.50, or 14.7 per cent.

The total expenditures being higher than the total receipts, a loss of ₱258,533.33 was sustained. This was ₱226,984.56 more than the loss sustained in 1928.

Combined telegraph-telephone service.—There were handled through the combined telegraph-telephone system 8,794 messages, or an increase of 340, equivalent to 4.02 per cent, as compared with that of the previous year which was 8,454.

Special telegraph-telephone service.—The total number of telegrams, both received and delivered over the telephone, was 2,798, which brought ₱3,728.92 in telegraph tolls and ₱627.92 in telephone fees. There was thus an increase of 1,202, or 75.3 per cent, in number of messages, ₱1,420.68, or 61.5 per cent, in telegraph tolls and ₱257.98, or 69.7 per cent, in telephone fees, the previous year's figures being 1,596, ₱2,308.24, and ₱369.94, respectively.

Night lettergram service.—There were filed for transmission 2,870 night lettergrams, containing a total of 107,817 words, the tolls on which amounted to ₱3,612.34, or an increase of 169.2 per cent in the number of messages, 97 per cent in the number of words, and 12.9 per cent in the amount of tolls, the 1928 figures being 1,066 lettergrams, 54,656 words, and ₱1,572.35 in tolls. At the close of the year the service was in operation at 22 offices where there was night service, namely, Aparri, Baguio, Cagayan de Misamis, Capiz, Cebu, Dagupan, Davao, Dumaguete, Guinayangan, Ilagan, Iligan, Iloilo, Kabasalan (operator's salary paid by private company), Laoag, Legaspi, Lucena, Masbate, Naga (Camarines Sur), Romblon, Tacloban, Vigan, and Zamboanga.

Ship radio business of bureau of posts stations.—There were exchanged between ships and coastal stations 6,453 paid messages, containing a total of 89,773 words, as against 3,778 messages and 59,760 words handled in 1928. There was, therefore, an increase of 70.8 per cent in the number of messages and 50.2 per cent in the number of words. The total amount of coastal charges was ₱10,772.76, as against ₱7,171.20 of the previous year, or an increase of ₱3,601.56, or 50.2 per cent.

Cable and radio services with foreign countries via Eastern Extension.—During the year we turned over to the Eastern Extension Australasia & China Telegraph Co. (Ltd.) a total of 2,281 cablegrams for abroad, or 2,202 less than the number handled in 1928, which was 4,483. For these cablegrams we paid the company ₱15,912.65, as against ₱30,572.83 paid in 1928, or a decrease of ₱14,660.18, equivalent to 47.9 per cent. This company turned over to the bureau of posts for transmission to the Provinces 3,302 messages from abroad, as against 3,146 the previous year, or an increase of 156 or 4.9 per cent. For these the company paid us ₱5,202.69, or a decrease of ₱295.47 or 5.3 per cent as compared with the amount paid in 1928, which was ₱5,498.16.

Via Commercial Pacific.—To the Commercial Pacific Cable Co. we turned over 1,303 cablegrams for abroad, paying therefor ₱12,256.20, or a decrease of 779 messages and ₱11,361.68 in tolls, the figures for 1928 being 2,082 and ₱23,617.95, respectively. There were turned over to us by this company 3,740 messages for transmission to the Provinces, paying us therefor ₱5,482.15, or an increase of 172 messages and ₱291.76 in the amount of tolls, the previous year's figures being 3,568 messages and ₱5,773.91.

Via Radio Corporation of the Philippines.—This corporation opened its transoceanic radio service on June 28, 1927. During the year 1929 the bureau turned over to the corporation 484 messages, of which 66 were for ships and the rest for points abroad. The Radio Corporation turned over to us 1,586 messages, of which 211 were from ships and the rest from other countries. We paid the

corporation ₱4,706.13 and the corporation paid us ₱1,235.55, the previous year's figures being ₱7,057.54 and ₱1,925.97, respectively. Since the establishment of the Radio Corporation's transoceanic service there have been several reductions in the rates on messages for and from foreign countries. These reductions have undoubtedly benefited all users of the cable service.

Via naval communication service.—We turned over to the naval radio station at Los Banos a total of 754 messages and received from it 6,550, or a grand total of 7,304, which, compared with 5,498 of the previous year, meant an increase of of 1,806, or 32.8 per cent. This business consisted almost wholly of press dispatches.

Radio service between Philippines and British North Borneo.—The direct radio service between the Philippines and British North Borneo, through radio Zamboanga and radio Sandakan, was established on April 9, 1920. During the year under review 256 messages, containing 2,094 words, were exchanged between Zamboanga and Sandakan, or a decrease of 117 or 31.3 per cent in the number of messages and 1,309, or 38.4 per cent, in the number of words, the previous year's figures being 373 and 3,403, respectively. The tolls amounted to ₱460.80 for us and ₱408.43 for British North Borneo, as against ₱1,228.36 and ₱1,179.68 the previous year, thus showing a decrease of ₱767.56 for the Philippines and ₱771.20 for North Borneo.

S O S service.—From 1923 to 1928, our radio stations were of service to 16 ships in distress by picking up their distress calls and communicating the same to other ships and to the proper authorities, thus bringing the needed help. During the year 1929, our stations were again of service in the following cases:

Steamship "Churruga."—On January 8, while this steamer was drifting toward a very dangerous place between San Jacinto and Matabao, Ticao Island, due to breakage of the main engine, her distress call was picked up by the cableship *Bustamante*, which was on cable repair work. The cableship came to the rescue of the *Churruga* and towed her to Bulan, Sorsogon.

Steamship "Yusingco."—On January 10, this steamer was stranded north of Point Baluarte near Calaguan, Leyte. It was reported that a small hole was found in the asthold. Our radio station at Iloilo picked up the distress signal.

Steamship "Leyte."—On January 12, this steamer ran aground off Maripipi Island. Our radio station at Iloilo picked up the distress signal.

Steamship "Bohol."—At 9.30 p. m. on March 9, our radio station at Legaspi picked up a call for help from the steamship *Bohol* which had run aground on Black Rock, Ticao Island.

Steamship "Union."—At 11.45 p. m., March 25, our radio station at Legaspi picked up a distress signal from this steamer when its engine was in trouble while she was northwest of San Fernando, La Union.

Steamship "Yungchion."—At 3.50 a. m., April 20, our radio station at Iloilo picked up a distress signal from U. S. S. *Milwaukee* reporting that steamship *Yungchion* had run aground near Tsingtao and in danger on account of strong wind.

Steamship "Ningchow."—At 8.15 a. m., July 11, our radio station at Legaspi picked up a general alarm from this steamer to the effect that a sunken craft with two spars above the water was at a certain place and was dangerous to navigation.

Steamship "Yuenlee."—At 12.30 a. m., October 22, our radio station at Legaspi picked up a general alarm from radio Shanghai to the effect that this steamer had sunk while heading up the river.

Steamship "Hosang."—On November 29, this steamer was reported by our radio station at Iloilo to have collided with a small fishing junk.

Steamship "Hayching."—On December 8, our radio station at Iloilo reported that this steamer was pirated and on fire off Chilang Point.

Steamship "Fernulen."—On December 8, our radio station at Iloilo reported that this steamer had run aground southeast of Tomonton Shoal.

Steamship "Yrankenyumaru."—On December 9, our radio station at Zamboanga reported that this steamer was stranded off southeast Palawan.

Telegraph lines and submarine cables repaired and improved.—Repair and improvement work was done on 1,935 kilometers of telegraph wires. Nineteen submarine cables required the attention of the cableship *Bustamante* a total of twenty-two times, the faults ranging from "heavy escape" to "complete break." All of these cables were of the india-rubber type laid many years ago.

Efficient submarine cables from London successfully laid.—Two years ago, the Philippine government purchased from Siemens Bros. & Co., London, England, 280 nautical miles of gutta-percha cables. After a long exchange of messages between this office and the bureau of insular affairs as to ways and means of bringing the said cables to the Philippines, we finally, and most happily, accepted

the offer of the War Department Signal Corps for the use of the cableship *Dellwood* for both transporting and laying the cables in Philippine waters.

According to arrangements the *Dellwood* left Seattle, Wash., on August 15, 1929, arriving in London, England, on September 24. Laden with the 280 miles of gutta-percha cables, the *Dellwood* sailed from London on October 2, reaching Manila on November 20. She started for the Southern Islands on November 26, and returned on December 29, after laying the new cables between Luzon Island (Lucena) and Marinduque Island (Boac), between Marinduque Island (Boac) and Romblon Island (Romblon), between Romblon Island (Romblon) and Panay Island (Capiz), between Panay Island (Iloilo) and Guimaras Island (Dapdap), between Guimaras Island (Dapdap) and Negros Island (Pulupandan), between Negros Island (Escalante) and Cebu Island (Taboilan), and between Cebu Island (Daan Bantayan) and Masbate Island (Placer).

The accomplishment of the *Dellwood* in the transportation and laying of the new cables was most satisfactory. Not only was each piece of cable carefully laid and tested but also a minimum amount of cable was used, considerable length of valuable cable having been thus saved.

The purchase price of 280 nautical miles of gutta-percha cables was ₱346,800. The cost of transportation and laying by the *Dellwood*, including expenses of the vessel on the return trip to Seattle, was estimated at ₱186,000. The actual cost will not be definitely known until after the commanding officer of that vessel has submitted all expense accounts.

Submarine cables and telegraph lines in operation.—The total length of telegraph wires in operation at the close of the year was 13,712 kilometers, or 238.01 more than that in operation at the close of the previous year which was 13,473.01 kilometers. The total length of submarine cables was 1,447.489 kilometers or 392.849 more than that at the close of the previous year.

To sum up, there was an increase of 627.859 kilometers or 4.3 per cent in the combined length of telegraph wires and submarine cables, which were 15,159.489 kilometers at the close of 1929 and 14,531.63 kilometers at the close of 1928.

Telegraph lines with a total wire length of 522.74 kilometers were constructed during the year, the most important of which were the copper wire across Guimaras Island; the copper wire between Pulupandan and Bacolod, Occidental Negros; the copper wire between Taboiland and Logo, Cebu; and the copper wire between Capiz and Iloilo (partly completed). New submarine cables, 456.342 kilometers in length, were laid. There were discontinued or removed 284.73 kilometers of telegraph lines and 63.493 kilometers of submarine cables.

Licensing of radio stations.—Several changes were made in the call letters and frequencies or wave lengths of the different radio stations in the Philippine Islands. Amateur stations were required to use the prefix "KA" in place of "K," which was formerly used, to distinguish them from amateurs in the United States. All ship stations were required to have at least one additional wave length between 650 and 770 meters, besides the 600 meters which is the international calling and distress wave. This requirement is in conformity with the provisions of the International Radio Convention of 1927 and is adopted here to avoid too much congestion on 600 meters in view of the increasing number of ship stations. The frequencies assigned to certain private radio stations were also changed.

Ship stations in operation.—There were 14 new licenses and 46 renewals issued to ship stations. The total number of ship stations in operation at the end of the year was 68, including 9 government vessels, or an increase of 3 as compared with the number in operation at the close of the previous year.

Privately owned radio stations.—There were in operation at the close of the year 10 radio stations for exclusively private use, 3 of which were owned by Macleod & Co., 5 by Cadwallader-Gibson Lumber Co., and 1 each by Mambit Lumber Co., and Visayan Stevedore Transportation Co. The 10 stations were located as follows: 2 in Manila; 1 each at Cebu, Iloilo, Davao, Limay, and Camiguin Island, and Sipaco, Lamit, and Tambang, in Camarines Sur.

Two private stations in Manila and Panabutan of the Panabutan Lumber & Plantation Co. were discontinued during the year.

Of semipublic stations, the Manila Railroad Co. had in operation one in Manila and another at Naga, Camarines Sur, used primarily for the business of the company, but subject to the condition that the coastal charges on other parties messages exchanged with the company's ship stations shall accrue to the government.

There were two special privately owned stations, one in Manila and another in Fabrica, Occidental Negros, used exclusively for the business of the Insular

Lumber Co., but subject to the condition that regular telegraph charges on all messages exchanged between the two stations shall accrue to the government.

Five other privately owned stations were in operation, namely: 1 at Lumara, Zamboanga, owned by the Hercules Lumber Co.; 1 at Naga-Naga, Zamboanga, owned by the Mindanao Lumber Co.; 1 at Port Lamon, Surigao, owned by the Port Lamon Lumber Co.; 1 at Milbuk, Cotabato, owned by Mr. Henry E. Neibert; and 1 at Kabasalan, Zamboanga, owned by the Goodyear Rubber & Tire Co. These stations, though operated primarily for the business of the companies mentioned, were open to the general public as regular telegraph stations of the bureau of posts.

Public service radio stations under private operation.—The marine service and the 12 transoceanic stations of the Radio Corporation of the Philippines in Manila continued in operation. In addition, nine other transoceanic feeder stations of the said corporation located in Manila, Aparsi, Laoag, Cebu, Iloilo, Tacloban, Zamboanga, Davao and Cagayan de Misamis, were licensed.

The Robert Dollar and the Mackay Radio & Telegraph Cos. which had been granted franchises by the Eighth Philippine Legislature to transmit and receive commercial messages to and from foreign countries and ships at sea, started construction of their respective radio stations at Las Pinas, Rizal, and San Felipe Neri, Rizal. So that it could experiment with the different frequencies assigned, the Robert Dollar Co. was granted experimental station licenses.

Broadcasting stations.—As in the previous year, there were only two companies licensed to operate broadcasting stations. The Radio Corporation of the Philippines installed an additional short-wave broadcasting apparatus in Manila and a long-wave broadcasting station at Cebu. The broadcasting service of this corporation was thus greatly improved. A small broadcasting station was continued in operation by I. Beck (Inc.).

Amateur and training school stations.—The number of amateur stations in operation at the close of 1929 was 44, or an increase of 16 as compared with that of the previous year.

The Philippine School of Arts and Trades and the Radio Institute of the Philippines continued operating the two technical and training-school stations which were in existence since 1927.

Radio operators.—At the end of the year there were 219 qualified and licensed radio operators, of which 137 were of the first-class commercial, 31 of the second-class commercial, and 51 of the amateur grade. On the same day of the previous year there were 118 first-class commercial, 38 second-class commercial, and 42 amateur-grade radio operators, or a total of 198. There was thus an increase of 21.

Typhoons and communication interruptions.—Twelve typhoons passed over the Philippines causing damages to the telegraph lines and radio stations. The most destructive was the one that swept the eastern coast of Luzon on the first days of September. The places most severely affected and where the communication system was paralyzed were Tayabas Province, Camarines Norte, Camarines Sur, and Catanduanes. The radio station at Infanta, Tayabas, was completely destroyed; the one under construction at Capalonga, Camarines Norte, was also completely destroyed. Other radio stations were temporarily interrupted. Telegraph lines in certain places were crushed to pieces or carried away by floods.

Agreement with Radio Corporation for handling of domestic telegrams.—The Radio Corporation of the Philippines had been handling domestic telegrams since August 17, 1928. No written contract was, however, entered into between the government and the corporation until February 9, 1929, when a formal agreement was made and signed under Act No. 3180.

The corporation was authorized for one year from the date its ninth station was completed (May 10, 1929) to accept directly from the public telegrams addressed to certain specified places, and all telegrams filed at bureau of post offices destined to those places were to be transferred to the stations of the corporation for transmission unless otherwise requested by the senders. The corporation was to receive not exceeding 90 per cent of the established tolls charged by the bureau of posts.

BUREAU OF SUPPLY

PURCHASES

The purchases undertaken by the bureau during the year 1929 amounted to ₱12,330,623.09. Compared with the figures of the previous year, these purchases were distributed as follows:

	1929	1928
Local merchants—		
Through the bureau of supply.....	P9,531,759.62	P11,596,351.03
Under the direct order and payment system.....	1,235,092.50	2,345,119.00
The United States.....	1,549,708.26	2,068,092.12
Foreign countries.....	14,062.71	101,259.93

The decline in the amount of supplies and materials purchased, as may be noted above, was due to the fact that many offices made direct purchases of supplies in accordance with department orders Nos. 73 and 102, authorizing purchases outside of the bureau of supply under certain conditions. The prices paid for the supplies thus purchased, however, were compared with the prices at which the bureau could have furnished them. A number of cases of municipalities paying exorbitant prices were reported to the executive bureau.

STOCK

The value of the supplies carried in stock on December 31, 1929, was P755,-692.74, while the corresponding amount in 1928 was P710,214.26, showing a slight increase.

The purchases for stock during the year amounted to P2,938,147.65. In 1928 the purchases were in the amount of P2,432,988.14. This increase was due to the fact that during the year large quantities of pipe were bought for several projects of the bureau of public works and of the metropolitan water district.

The stock on hand consisted mostly of tested cement, coal, galvanized iron roofing, and structural-steel bars. The bureau kept also in stock the items most commonly needed by the government. Supplies for stock were bought twice a year in order to have on hand fresh stock of such supplies as were commonly and constantly needed by the government and to lessen the routine work of the bureau which otherwise would have to procure the supplies in small quantities at retail prices. Furthermore, purchases of large quantities of supplies for stock promoted competition among local merchants.

The stock supplies did not, as a rule, remain long in the warehouses.

SALES

The bureau's sales in 1929 were distributed as follows:

Bureaus and offices.....	P5,194,668.28
Provinces and municipalities.....	4,084,506.17
Private parties.....	1,830,793.71
Total.....	11,118,966.16

The foregoing figures do not include the purchases made by the different branches of the government under the direct order and payment system.

INCOME

The net profit on operation of the bureau amounted to P327,401.15, and that of the division of cold storage was P42,209.77, shown as follows:

	1929	1928
Bureau of supply:		
Gross earnings derived from operation.....	P620,787.93	P656,611.17
Expenses for salaries, wages, supplies and materials, and other expenses.....	293,386.78	294,831.90
Net profit on operation.....	327,401.15	361,779.27
Division of cold storage:		
Gross earnings.....	501,905.88	534,827.74
Total expenses.....	459,696.11	474,158.82
Net profit.....	42,209.77	60,668.92

Payments in the total amount of P159,480.65 from the appropriation for supplies and materials were made to Edward J. Nell Co., for the electrical machinery installed by them in 1928, to apply on capital and interest of the cost of the machinery which was P297,055.21.

PERSONNEL

The year 1929 recorded a very significant change in the personnel of the bureau. With the vacancy created by the transfer of Mr. Manuel de Yriarte, assistant purchasing agent ad interim, Mr. Antonio Aquino, chief buyer, was promoted to the position of assistant purchasing agent. It was the first time in the history of the bureau of supply that an employee from the rank and file who was originally appointed to the bureau was promoted to an executive position, thus giving encouragement to other employees to work hard and look forward to a higher position as a recognition of long continuous and meritorious services rendered to the government. As a result of the promotion of Mr. Aquino, Mr. Pedro Santos, assistant chief buyer, who was detailed to organize the inspection division, and appointed chief inspector thereof, was promoted to the position of chief buyer. This brought an upward movement of the personnel.

On October 12, 1929, Mr. Antonio Aquino, the assistant purchasing agent, was called to the department to act as assistant to the department secretary and Mr. Pedro Santos was designated acting assistant purchasing agent; Mr. Crispulo Tolentino as acting chief buyer; and Mr. Felipe Lazareto as acting chief, division of supplies.

These changes, together with the designation of Mr. F. Segado, purchasing agent, as acting director of commerce and industry on July 16, 1929, and the simultaneous absences of buyers because of sickness, caused delays in the filing of requisitions the latter part of the year.

BUYING DIVISION

As stated elsewhere in this report, the supplies purchased under the direct order and payment system was in the total amount of ₱1,235,092.50. This system, under which the requisitioner ordered the supplies and made direct payment to the contractor, relieved the buying division of much routine work and made it unnecessary to stock many items of supplies.

The buying division acted upon 11,388 requisitions received from bureaus and offices in Manila, and 16,650 provincial and municipal requisitions; issued 75,075 buyer's orders; and prepared 1,862 letter orders and 378 contracts based on 292 circular proposals during the year 1929.

ACCOUNTING DIVISION

The work done by this division may be summarized as follows:

Treasury warrants issued	18,797
Sales vouchers prepared	43,080
United States orders prepared	1,050
Customs entries made	179
Payments received	₱12,255,032.21
Cash deposits received	₱114,718.60
Official receipts issued	6,632

DIVISION OF SUPPLIES

The following is a summary of the volume of work handled by the division of supplies during the year:

	Number of packages	Tonnage		Number of packages	Tonnage
Outgoing shipments:			Incoming shipments:		
Provincial, marine	368,983	22,352.614	Provincial	12,933	1,731.071
Provincial, overland	476,388	33,305.398	United States and foreign	32,640	10,331.699
United States and foreign	450	38.068			

INSPECTION DIVISION

The personnel of this division inspected all supplies ordered, and saw to it that the supplies delivered by the dealers conform in every respect to the specifications given in the buyer's order, letter order, or contract. The work was necessary and important and, judging by the results accomplished, the creation of the division in 1928 was a wise step.

DIVISION OF COLD STORAGE

The net profit of the division of cold storage during the year 1929 amounted to P42,209.77, as against P60,668.92 in 1928. This decrease was due to the fact that the manufacture of ice had to be curtailed on account of deficiency of funds, and also to the smaller cold-storage space rented by the United States Army and Navy and private parties. Moreover, some improvements were introduced in the government ice plant which contributed to the decrease of its net profit.

A monthly saving of about P7,500 was made in the consumption of ammonia, electric current, coal, and lubricating oil, and this amount was paid to Edward J. Nell Co., as per contract. As soon as the entire obligation is paid off, the saving can then be used in the purchase of items that enter into the manufacture of ice.

BUREAU OF COMMERCE AND INDUSTRY

ORGANIZATION

There was no change in the organization of the bureau until November 6, when, in order to secure a closer coordination in the trade-promotion work of the bureau, the activities pertaining to that work, and the commercial, research, and statistics divisions were consolidated into one group, called the trade promotion group. The said group consists of eight services as follows:

Commercial intelligence service, market quotation service, editorial service, field service, industrial service, statistical service, domestic trade service, foreign trade service.

All these services were placed under the direct and immediate supervision of a trade assistant, who is at the same time the head of the commercial intelligence service.

CHANGES IN PERSONNEL

Important changes took place in the personnel of the bureau. As a result of the administrative investigation conducted pursuant to department order No. 78, a number of officials and employees were separated from the service. After reductions in personnel due to resignations and other causes, the entire force at the end of 1929 numbered 862 as against 1,031 in 1928, a decrease of 169 men.

The following list was of December 31, 1929:

Director and assistant director.....	1	Property clerk.....	1
Chiefs of division.....	6	Assistant property clerk.....	1
Superintendents.....	2	Shop accountant.....	1
Assistant chiefs of division.....	4	Assistant shop accountant.....	1
Chiefs of section.....	10	Night captain of the year.....	1
Assistant chief of section.....	1	Stenographers.....	3
Commercial agents.....	3	Draftsman.....	1
Assistant commercial agents.....	4	Clerks.....	66
Junior commercial agents.....	13	Tourist guides.....	4
Captains of vessels.....	4	Messengers.....	5
First officers.....	4	Head janitor.....	1
Second officers.....	4	Laborers (mozos).....	5
Third officers.....	2	Laborers (storeroom).....	15
Chief engineers.....	4	Watchmen.....	9
First assistant engineers.....	4	Petty officers, patrons, and crews.....	161
Second assistant engineers.....	4	Lightkeepers, apprentices, and boatmen.....	291
Third assistant engineers.....	2	Foremen, mechanics, and laborers of shop.....	218
Radio operators.....	4		
Assistant chief accountant.....	1	Total.....	862
Collecting officer.....	1		

FINANCIAL STATEMENTS

The expenses of the bureau, excluding the marine railway and repair shops, during the year 1929, totaled P1,081,376.18, or a decrease of P63,833.77 as compared with those of the previous year as shown in the following comparative tabulations:

	1929	1928	Increase (+) or decrease (-)
Administration.....	P88,596.15	P101,210.42	- P12,614.27
Trade-promotion service.....	165,504.48	155,753.06	+9,751.42
Steamship service.....	633,010.36	693,313.42	-60,303.06
Lighthouse service.....	194,265.19	194,933.05	-667.86
	1,081,376.18	1,145,209.95	-63,833.77

INCOME

A comparative statement of the income of the bureau, excluding that of the marine railway and repair shops, for the years 1928 and 1929 follows:

	1929	1928	Increase (+) or decrease (-)
INCIDENTAL REVENUE			
Fines and forfeitures.....	₱4.84	₱72.80	— ₱67.96
Mercantile register fees.....	62,651.00	53,843.00	+8,808.00
EARNINGS AND OTHER CREDITS			
Service income:			
10 per cent surcharge on supplies sold.....	12.76	14.47	— 1.71
Fees for issuance of certified copies of articles of incorporation, etc.....	5,217.70	4,752.65	+465.05
Operation of vessels.....	107,165.09	138,863.06	—31,697.97
Income from rentals.....		110.00	—110.00
Miscellaneous receipts.....	3,647.13	3,017.98	+629.15
Sales of fixed assets.....	1,638.66	3,369.48	—1,730.82
Credit adjustment prior year expense.....	12,269.50	4,770.62	+7,498.88
Total.....	192,606.68	208,814.06	—16,207.38

Income and expenses of the marine railway and repair shops.—The operation statement of the marine railway and repair shops shows a net loss of ₱46,400.08 for 1929. The net profit for the previous year was ₱7,346.80. The following statement does not include the amount of ₱28,085.05 expended during the year 1929 for the repair of marine railway No. 1, for which there is provided in the 1929 appropriation act (item PP-20, Act 3459) an amount of ₱30,000 as special appropriation.

Income:

Service income on repair work.....	₱178,719.31
Production account on casting.....	2,198.45
Service income on docking.....	1,398.51
Other income:	
Miscellaneous receipts.....	₱110.09
Credit adjustment prior year expense.....	2,114.56
	2,224.65
Total income.....	184,540.92

Expenses:

Productive labor—	
Repair work.....	₱81,757.02
Casting.....	1,248.37
Docking.....	477.28
	83,482.67
Supplies and materials put in process—	
Repair work.....	₱37,938.76
Casting.....	446.26
Docking.....	5.38
	38,390.40
Administrative and factory expenses—	
Salaries.....	12,405.95
Wages.....	33,462.52
Clothing allowance of watchmen.....	139.29
Traveling expenses.....	45.45
Postal, telegraph, telephone, and cable service.....	1,151.04
Miscellaneous service.....	181.75
Supplies and materials.....	12,336.90
Illumination and power service (Manila Electric Co.).....	9,638.40
Illumination and power service (power plant at Engineer Island).....	35,440.14
	104,801.44
Other expense—	
Maintenance of plant and equipment.....	4,025.24
Depreciation of plant and equipment.....	241.25
	4,266.49
Total expenses.....	230,941.00
Net loss.....	46,400.08
	184,540.92

GENERAL TRADE PROMOTION SERVICE ACTIVITIES

First Filipino business men's convention.—With the support and cooperation of the bureau, the first Filipino business men's convention was held in Manila on February 6, 7, 8, and 9 under the auspices of the Chamber of Commerce of the Philippine Islands. Upon the request of this chamber, a number of our qualified employees were released to furnish technical assistance and expert advice to the convention. In outlining the program of activities to be pursued, collecting and systematizing trade data and other miscellaneous information that were needed, and drafting resolutions that were presented for discussion, the bureau furnished useful suggestions and much valuable information. The general publicity campaign for the convention was placed under the immediate supervision and direction of the editorial section of the bureau.

The convention was generally considered a great success, and the Chamber of Commerce of the Philippine Islands was quick enough to recognize the contribution of the bureau thereto. In a resolution unanimously passed by that body on March 12, 1929, it took occasion to laud the trade information service of the bureau, and to request higher authorities of the government to provide a more liberal appropriation in order to enable the bureau to expand its trade promotion activities, have a better equipped sample room for various native products, and take part in important commercial and industrial exhibitions abroad in the interest of local industries. Several officials of the bureau were made honorary members of the chamber in recognition of their services.

COMMERCIAL INTELLIGENCE SERVICE

Correspondence received and acted upon.—The commercial (intelligence) division received 3,306 mail matters, inquiries on different phases of commerce and industries, covering a wide range of subjects. Of this number, 2,511 came from different parts of the archipelago and 795 from foreign countries.

Of correspondence received from foreign countries, the places of origin and figures for 1928 and 1929 are given below:

Place of origin	Number received		Place of origin	Number received	
	1928	1929		1928	1929
United States:			Holland	4	
Philippine Government Commercial Agency	182	205	Hong Kong	12	23
Other parts of the Union	325	320	India	19	16
Alaska	1	0	Italy	5	6
Argentina	1	1	Japan	43	32
Australia	12	24	Java	1	2
Austria	2	3	Macao	1	0
Belgium	4	6	Manchuria	0	1
Bohemia	0	2	Mexico	3	0
Borneo	1	3	New Zealand	0	4
Bulgaria	0	1	Norway	3	3
Canada	1	6	Palestine	2	0
Czechoslovakia	0	2	Paraguay	0	1
Cochin China	2	0	Portugal	0	1
China	21	12	Rumania	0	1
Cuba	3	1	Siam	4	4
Denmark	1	1	Spain	2	6
Dutch East Indies	1	2	Straits Settlements and Federated		
Dutch West Indies	0	2	Malay States	4	5
Egypt	3	5	Sweden	1	0
France	11	8	Switzerland	1	2
French Indo-China	1	4	Tasmania	1	1
Germany	23	21	United Kingdom	20	27
Gothia	0	1	Union of South Africa	0	9
Greece	0	1	United States of Soviet Russia	3	1
Guatemala	0	3	Total	729	795
Hawaii	5	8			

Mail matter prepared and released.—The mail matter dispatched by the commercial division during 1929 as compared with 1928 follows:

	Number of each			Number of each	
	1928	1929		1928	1929
Letters	1,871	2,573	Telegrams	112	133
Circular letters	27	19	Trade opportunities	31	26
Endorsements	168	237	Press notes	196	190
Memoranda	8	14	Market (quotation) reports	271	167

Trade opportunities.—There were published 26 trade opportunities during the year. Two thousand six hundred copies in both English and Spanish, or an average of 100 copies for each trade opportunity, were prepared and released to inquirers and also to the press for the information of the business public. Twenty verbal and 23 written inquiries coming from interested parties in the islands and the United States were received in answer thereto as compared with 20 and 64, respectively, in 1928. The following shows the sources of requests for business connections through this trade-opportunity service of the bureau during the year 1929:

Africa	2	Japan		3
China	1	Norway		1
Dutch West Indies	1	Spain		1
France	3	United Kingdom		1
Germany	1	United States		10
Hong Kong	1	Total		26
India	1			

Publications.—The following is a comparative statement of the kind and number of publications disposed of by the bureau for 1928 and 1929:

Title of publication	Number of copies disposed of	
	1928	1929
Economic Map of the Philippine Islands	186	27
Tourist Handbook of the Philippine Islands	580	613
Commercial Handbook of the Philippine Islands	105	187
Directory of Importers and Exporters in the City of Manila	31	15
Corporation and Partnership Laws of the Philippine Islands as amended up to Dec. 31, 1924	4	2
Commerce and Industry Journal (those sent to subscribers excluded)	110	90
Miss Philippines is Calling You (folder)	1,747	2,016
Laws, Rules, and Regulations Governing the Registration of Trade-Marks and Trade Names		2
The Philippine Islands (pamphlet) (new)	153	24
Bureau of Commerce and Industry (pamphlet)	134	17
Peanuts as Money Crop (leaflet)	179	141
Egg Industry of the Philippines (leaflet)	195	106
Big Markets Open for Philippine Kapok (typewritten)	121	53
Paper Manufacturing in the Philippines (leaflet)	169	81
Philippine Cabinet Woods Have a Wide Market (leaflet)	158	71
The Need for a Greater Philippine Rice Production (typewritten)	194	150
Possibilities of the Silk Industry in the Philippine Islands (leaflet)	168	83
The Possibilities of Rubber Industry in the Philippine Islands (typewritten)	174	66
Philippine Rattan Industry Offers Excellent Opportunity (leaflet)	165	89
Possibilities of Dairying and Meat Production in the Philippines (typewritten)	123	64
The Possibilities of the Pineapple Industry in the Philippines (leaflet)	170	125
Great Opportunity in Desiccated Coconut Industry (typewritten)	106	49
Lists of Lights, Buoys, Beacons, and Day Marks of the Philippine Islands	4	1

In view of the numerous requests for information on the different industries of these islands, typewritten copies were made of the various articles and reports of investigations undertaken by commercial agents for distribution to those parties who might make good use of them. A good number of these articles and reports were given out during 1929, as shown on next page:

TITLE OF REPRINT AND NUMBER OF COPIES DISPOSED OF

Adlay as a Grain Crop in the Philippines.....	72
The Asbestos Industry.....	64
The Banana Industry.....	156
Button Manufacturing in the Philippines.....	68
The Cacao Industry in the Philippines.....	219
The Fruit Canning Industry in the Philippines.....	145
Cattle Raising Industry in the Philippines.....	120
The Coffee Industry in the Philippines.....	149
Dairying and Meat Production in the Philippines.....	71
Desiccated Coconut in the Philippines.....	89
The Desiccated Coconut Industry.....	86
The Egg Industry in the Philippines.....	124
The Philippine Embroidery Industry.....	98
Fishing as a Modern Industry.....	160
The Hat Industry in the Philippines.....	93
The Kapok Industry in the Philippines.....	110
The Leather Industry in the Philippines.....	70
Lumbang Nuts and Oil Industry.....	81
The Mining Industry in the Philippines.....	91
The Paper Industry in the Philippines.....	76
The Peanut Industry in the Philippines.....	105
The Pearl Fishing Industry in the Philippines.....	88
The Pili Nut Industry.....	84
The Pineapple Industry in the Philippines.....	94
The Pottery Industry in the Philippines.....	84
The Radio Industry in the Philippines.....	68
The Rattan Industry in the Philippines.....	79
The Rubber Industry in the Philippines.....	107
The Salt Industry and Resources of the Philippine Islands.....	100
The Silk Industry in the Philippines.....	92
The Starch-making Industry in the Philippines.....	92
The Philippine Sugar Industry.....	149
Textile Manufacturing in the Philippines.....	96

Total 3,380

Important callers.—Many calls for miscellaneous data and information were received from business men, government officials, representatives of consular offices and local and foreign business houses, tourist and other travelers, professionals, and students. There were 504 callers received and attended to during 1929 against 405 in 1928.

ILOILO COMMERCIAL AGENCY

Inquiries received.—During the calendar year just closed the agency received an aggregate of 1,283 inquiries, distributed according to medium of communication used, as follows: By letter, 137; by telephone, 234; by visitors, 910; and by telegram, 2.

CEBU COMMERCIAL AGENCY

Weekly and monthly reports.—Among the important matters attended to by the agency may be mentioned the gathering of market quotations for the weekly and monthly quotation service on copra, abaca, maguey, coconut oil, sugar, rice, corn, leaf tobacco, copra cake, bayones, flour, gasoline, petroleum, crude oil, cement, coal, galvanized iron, lumber, kapok, etc.; the compilation of export figures showing the amount and value of important native products exported weekly and monthly from the port of Cebu, and their respective destinations here and abroad; and the compilation of import figures for native products entering the port of Cebu during each month, and the different Provinces of origin of such products.

Range of distribution.—These weekly and monthly reports were mailed regularly to provincial treasurers and municipal presidents in the Provinces of Cebu, Bohol, Oriental Negros, Surigao, and Misamis; to business firms and farmers; to the Cebu Chamber of Commerce; and to local banks and Cebu newspapers. The main office in Manila and the Iloilo Commercial Agency were also regularly supplied with copies of these reports during the year.

MARKET QUOTATION SERVICE

Retail quotation service on rice in the public markets.—Toward the middle of the second quarter, in view of the steady advance of the price of rice, it was considered beneficial for the public interest to inform the consuming population of the prevailing retail prices of rice in the different public markets of Manila. This was done by the installation in said markets of big bulletin boards whereon prices of the different grades of rice sold in those markets were posted daily,

including wholesale quotations ruling in the Tutuban rice exchange every morning. Figures obtained from the different markets were compiled daily and furnished the daily newspapers. The Taliba and the Pagkakaisa published these reports every day.

Daily arrivals of rice and palay.—In order to be able to follow more closely the movement of this important commodity, it was deemed necessary to get the daily arrivals of both rice and palay from the primary markets, something which had not yet been undertaken by private reporting agencies. This service was featured daily by the commerce and finance section of the Manila Daily Bulletin.

Saigon quotation service.—The need for a direct rice quotation service with Saigon had long been felt, but it was only at the beginning of 1929 that the said service was started. Therefore, our information on the movement of the Saigon rice market was obtained exclusively from private sources. Considering the importance that rice plays in the life of our people, the necessity of having our own service was considered imperative. Since no funds had been provided for this service in the bureau's appropriation, economy had to be effected in the other cablegraphic services to enable the bureau to carry out this work, which should prove to be of immense benefit to merchants and producers alike.

Local quotation service.—The number of practically every quotation report has shown a healthy increase. The English daily registered a net increase of over 6,000 copies; the Spanish daily about 1,000 copies; the English weekly, about 2,000 copies. This increased number is the result of a growing demand for said reports as evidenced by numerous requests for same. Comparative statement of reports released in 1928 and 1929 follows:

	1929	1928
English Manila Daily Market Report		
Distributed in Philippine Islands-----	50,000	43,731
Sent to United States-----	4,568	4,568
Sent to foreign countries-----	336	336
	54,904	48,635
Spanish Manila Daily Market Report-----	23,725	22,848
English Weekly Market Report		
Distributed in Philippine Islands-----	61,660	59,932
Sent to United States-----	6,416	6,168
Sent to foreign countries-----	1,563	1,568
	69,614	67,668
Spanish Manila Weekly Market Report-----	8,472	8,412
English Manila Monthly Market Report-----	796	796
Spanish Manila Monthly Market Report-----	372	372
Spanish copies of Manila Tuesday Market Report-----	52	52
English Fortnightly Compilation of New York and Philippine Islands Sugar Prices-----	104	104

Licensing of brokers.—This activity registered a notable advance as compared with the previous year. A total of 326 licenses were issued, for which the bureau collected ₱1,630, compared with only ₱995 in 1928. Brokerage certificates released during the year were distributed as follows:

	Merchandise	Ship	Exchange	Stock
January-----	9	7	2	-----
February-----	11	13	4	-----
March-----	5	8	-----	-----
April-----	10	9	2	-----
May-----	8	7	2	-----
June-----	3	2	1	-----
July-----	6	6	2	2
August-----	12	2	1	-----
September-----	5	-----	-----	1
October-----	5	3	1	-----
November-----	5	1	-----	-----
December-----	87	35	42	7
Total-----	166	93	57	10

Foreign market quotation.—Weekly cable advices on the movement and prices of leading native staples in New York, London, Hong Kong, and Saigon were received as in previous years. Based on these cablegraphic reports over 70,000 copies of press notes of which about 66,000 were in English and the rest in Spanish were prepared and released. The contents of the New York cables were also transmitted by wire to our agents in Cebu and Iloilo. In view of the necessity of securing up-to-date daily information on the movement of our staple products in those markets, these weekly cablegrams had to be supplemented by what agents could get daily from private sources through the courtesy of reputable exporting concerns.

FIELD SERVICE

Cooperative marketing.—There was more favorable reaction to the campaign for the organization of cooperative marketing associations. Several associations were organized in the Bicol region. Most of them not only did take care of the marketing of their agricultural products cooperatively but also established stores where the members could purchase their supplies. The most important products handled by these associations were abaca and copra. With the establishment of cooperative stores, the Filipino participation in business is bound to increase.

In the Cagayan Valley, nine cooperative marketing associations were instituted and two cooperative associations, which were established under the ordinary corporation law, were reorganized. The marketing of tobacco in the Cagayan Valley was not continuous, hence, to make the members feel that their association was continually operating, the establishment of cooperative stores and cigar factories was suggested. In response to this suggestion the Echague Tobacco Growers Cooperative Association located in Echague, Isabela, is now operating a cigar factory, while that of the Tuguegarao Tobacco Growers Cooperative Association opened up a store in the barrio of Annafunan, Tuguegarao, Cagayan.

In Nueva Ecija and Bulacan, 13 associations were formed. In Mindanao, the Cotabato Valley Growers Cooperative Association was organized.

A total of 29 cooperative marketing associations were organized in 1929 through the help of the bureau.

The following cooperative marketing associations (the last two are composed wholly of Japanese) were organized and registered without the direct assistance of the bureau during the year although they came under its supervision:

	Authorized capital
Pampanga Cooperative Marketing Association	₱20,000
Sibalom Agricultural Cooperative Association	20,000
Davao River Industry Association (cooperative)	10,000
Gigos Planters Cooperative Association	5,000

At the close of the year there were 36 registered cooperative marketing associations throughout the Philippine Islands.

STATISTICAL SERVICE

This service received and answered a total of 507 inquiries in 1929, compared with 441 in 1928. These inquiries covered a wide variety of subjects, increasing in number year by year.

Statistical bulletins.—Statistical bulletin No. 11 for 1928 came off the press on September 26, 1929. This bulletin (No. 11), contains a map of the world, 24 diagrams or graphs, 163 tables and 228 pages, as against 23 diagrams, 155 tables and 208 pages of the bulletin No. 10 for 1927. The bulletin No. 11 contains more tables than any of the previous issues and covers the following subjects: Area and population, education, vital statistics, agriculture and public lands, livestock, forests, fishing, mining, labor and wages, manufacturing industries, oversea trade, domestic commerce, corporations and associations, prices, etc., transportation and communication, foreign shipping, domestic shipping, finance, banking and insurance, meteorological statistics, and miscellaneous.

Distribution of the bulletins.—In 1929, a total of 1,138 copies of statistical bulletins were distributed free of charge, as against 2,819 in 1928. There were sold 10 copies in 1929, compared with 111 sold the previous year.

TOURIST GUIDE SERVICE

Activities and accomplishments.—A record of unprecedented success sums up the activities of the tourist service during the year 1929. So far as independent parties landing at Manila are concerned, all previous records, since the inception of the service 11 years ago, have been broken. Both the number of independent parties taken care of by the guides, and the aggregate number of persons in the parties, have increased nearly 34 and 16½ per cent, respectively, compared with the year 1928. Also an increase of over 22 per cent was noted in the total number of passenger vessels boarded, compared with 1928. There were more persons given information on varied subjects either on board the boats or at our Manila hotel office than for the past four years combined. The demand for the services of local guides was so great that some of the agents of the bureau had to be utilized for the purpose.

Our tourist guides rendered assistance to 182 independent parties (i. e., not included in organized parties or the round-the-world cruises) composed of 560 people, while in 1928 only 136 such parties composed of 480 people were handled. This number, of course, does not include those that traveled independently and who did not require the assistance of our guides, and those that were taken care of by local friends. It does not include the passengers of the "round-the-world cruises" numbering 2,056 people to whom the tourist service of this bureau furnished guides.

The following table will speak better as to the volume of work handled by the tourist service of this bureau during the year:

	1929	1928
Total number of persons handled, including those brought by round-the-world cruises.	2,265	2,280
Number of independent parties taken care of by our guides	182	136
Total number of persons traveling independently	560	480
Total number of persons given information but not accompanied by any guide	1,111	186
Total number of vessels boarded	161	131

Round-the-world cruises

Operated by—	Number of tourists	
	1929	1928
American Express Co.:		
Steamship Belgenland	483	331
Steamship Malolo (around Pacific cruise)	354	—
Canadian Pacific:		
Steamship Empress of Australia	410	331
Frank C. Clarks:		
Steamship Caledonia	—	449
Thomas Cook & Sons:		
Steamship Franconia	417	325
Hamburg America Line:		
Steamship Resolute	370	380
Thomas Cook & Sons:		
Motor yacht Stella Polaris	31	—
Total	2,065	1,816

REGISTRATION OF MERCANTILE DOCUMENTS

The registration of corporations, partnerships, and patents and trade-marks is performed by the bureau's legal division (mercantile register) which is composed of three sections: namely, the corporations section, the partnerships section, and the patents and trade-marks section.

CORPORATIONS SECTION

The work accomplished by this section is shown as follows:

Fees collected

	Fees collected
20 licenses were issued to foreign corporations to transact business in the Philippines-----	₱ 2,825.00
256 articles of incorporation of stock corporations were examined and filed-----	15,905.00
67 articles of incorporation of nonstock corporations including beneficent societies, clubs, schools, and religious organizations, were examined and filed-----	1,675.00
48 certificate of increase of capital stock of various corporations, were examined and filed-----	5,950.00
51 amended articles of incorporation of various corporations, were examined and filed-----	510.00
231 by-laws of various corporations, were examined and filed-----	462.00
68 amendments to by-laws of various corporations were examined and filed-----	136.00
3 substitute appointments of chief priests of religious corporations, were examined and filed-----	30.00
1 cancellation of deed of trust-----	3.00
13 substitute appointments of agents of foreign corporations, were examined and filed-----	130.00
18 powers of attorney, deeds of sale and other documents in connection with corporations registered in this office, were examined and filed-----	54.00
26 affirmative certificates regarding the registration of corporations, were issued-----	130.00
2 negative certificates regarding the non-registration of corporations, were issued-----	6.00
470 certified copies of corporation papers and certifications were issued-----	3,886.00
34 articles of incorporation and by-laws of cooperative marketing associations, were examined and filed-----	578.00
4 amended articles of incorporation of cooperative marketing associations, were examined and filed-----	20.00
1 amendment to by-laws of cooperative marketing association, was examined and filed-----	1.00
2 certificates of dissolution of various corporations, were examined and filed-----	50.00
25 articles of incorporation of puericulture centers were examined and filed-----	Exempt.
6 articles of incorporation and by-laws of rural credit associations, were examined and filed-----	Exempt.
Total amount collected during 1929-----	₱ 32,351.00
Total amount collected during 1928-----	25,904.50

Increase of 1929 collections over those of 1928----- 6,446.50

Partnerships section.—The following shows the work done by the partnerships section during the year, together with the fees collected therefor.

PARTNERSHIPS SECTION

The partnerships section did the following work:

	Fees collected
134 articles of copartnership were examined and registered-----	₱ 4,342.50
147 powers of attorney, bills of sale, modifications of articles of copartnerships, etc., were examined and registered-----	808.50
3 documents showing increase of capital of partnerships, were examined and registered-----	361.50
3 private merchants were examined and registered-----	31.50
3 negative certificates were issued-----	6.00
2 certificates of entry were issued-----	6.00
123 certified copies of partnership papers and certifications, were issued-----	581.00
Total amount collected during 1929-----	6,137.00
Total amount collected during 1928-----	6,056.50

Increase of 1929 collections over those of 1928----- 80.50

Patents and trade-marks section.—The following shows the work accomplished by the patents and trade-marks section during the year, together with the fees collected:

PATENTS AND TRADE-MARKS SECTION

The work of this section is tabulated below:

	Fees collected
451 trade-marks were examined and registered-----	₱ 26,780.00
182 assignments of trade-marks were examined and registered-----	1,820.00
119 certified copies of United States letters patents were examined and registered-----	238.00
41 assignments of United States letters patents were examined and recorded-----	82.00
14 labels of trade-marks were examined-----	70.00
101 certified copies of trade-mark registrations were issued-----	474.50
14 documents not required by law to be registered-----	42.00
Total amount collected during 1929-----	29,506.50
Total amount collected during 1928-----	26,634.50

Increase of 1929 collections over those of 1928----- 2,872.00

The total of the collections for the registration of corporations, partnerships, trade-marks, and patents during 1929 is ₱ 67,994.50, an amount greater than the collections during any of the last eight years.

STEAMSHIP AND LIGHTHOUSE SERVICE

Shipping section.—The following vessels were in operation during the year: Cutter *Apo*, steamship *J. Bustamante*, cutter *Corregidor*, cutter *Polillo*, launch *Jolo*, launch *Ethel*, scow *No. 2*.

The cutter *Basilan* remained out of commission.

The yacht *Apo* was exclusively reserved for the use of the governor general. One trip, however, was made by Senate President Quezon and party from April 14 to 25 upon authority of Acting Governor General Gilmore. Two short trips were made by Governor General Stimson, lasting two days each, the latter trip from February 16 to 18 was made by him together with Senate President Quezon and Speaker Roxas. Two trips were made by Acting Governor General Gilmore. Governor General Davis made three trips. One trip was made, upon authority of the governor general, for Mr. Perry Burgess, representative of the Leonard Wood Memorial for the eradication of leprosy, from December 18 to 24.

Steamship *J. Bustamante* was primarily maintained as a cable ship. During the year she made three trips for cable work, transporting at the same time laborers and materials for the construction of different radio stations of the bureau of posts. With the new cables recently laid out by the United States Army cable ship *Dellwood*, which was chartered by the bureau of posts, it is hoped that the steamship *J. Bustamante* may be available for more coast-guard work next year.

Only two trips were made in connection with the collection and segregation of lepers. The steamship *J. Bustamante* under charter of the Philippine Health Service made a tour around the Visayas and Mindanao to transport the relatives of lepers visiting at Culion, and to collect lepers from the different parts of the Visayas and Mindanao. Relatives of lepers from Luzon, as well as the employees of the Culion leper colony who were traveling on leave, were furnished free transportation on the vessels which made the lighthouse and semicommercial trips to Palawan.

The operation of the government vessels for semicommercial trips to Palawan and Batanes was continued during the year, although fewer trips were made than in previous years. Due partly to the laying off of the vessels for repairs and the demand for lighthouse work, only five of the monthly trips to Palawan were made, and two trips for the Batanes run, one of which (made by the cutter *Polillo* in April) did not reach Baseo due to rough sea. The absence of government vessels in Batanes was not, however, keenly felt by the public, as the steamship *Union* of the Compañía Tabacalera has made several trips to those islands.

During the year the vessels (excluding launches and scow) made 45 trips in all; of which 3 were for cable work; 17, for lighthouse work; 2 for leper collection; 9, for the governor general; 1, for the president of the senate; 7, for the combined lighthouse and semicommercial trips; and 6, for other governmental purposes including the trips for the Red Cross. They have traveled 70,499 nautical miles, and touched at 886 places; transported 3,228 passengers and 2,410 tons of cargo; and consumed 6,352 tons of coal. The following comparative statement shows the number of trips made, ports touched, miles traveled, and days spent on the trips made by these vessels for the years 1927 to 1929:

	1927	1928	1929
Number of trips made.....	40	50	45
Number of ports touched.....	878	977	886
Number of miles traveled.....	72,871	72,527	70,499

Salvage work.—On January 8, while the steamship *J. Bustamante* was off Capul Light station on a cable trip, an S O S signal was heard from the captain of the steamship *Churruga* which was in distress between San Jacinto and Matabao due to a breakdown in her engine. The *Bustamante* immediately changed her course and proceeded to the location of the *Churruga*, where she found her in a disabled condition. The *Bustamante* towed the *Churruga* to the port of Bulan for necessary repairs and continued on her cable work.

Patrol work.—On May 12 the cutter *Polillo* was placed at the disposal of the insular collector of customs. The cutter was ordered to patrol along the coast of Bataan with customs agents on board who were in charge of its movements. After two days on this service, the *Polillo* was released in Manila.

Relief work.—On May 19 the cutter *Polillo* was dispatched from Manila with several Red Cross units and medical supplies which were distributed at different places in Sorsogon, Samar, Leyte, and Cebu.

Immediately after this trip another expedition of doctors, dentists, nurses, agriculturists, etc., was made on the cutter *Polillo* which left Manila on May 31, 1929.

LIGHTHOUSE SECTION

The following table shows the number and class of aids to navigation maintained during 1929, as compared with those of 1928:

Class	1928	1929	Increase (+) or de- crease (-)
LIGHTS			
First order, flashing	3	3	-----
Second order, flashing	1	1	-----
Third order, flashing	10	10	-----
Fourth order, flashing	9	9	-----
Sixth order, flashing	11	11	-----
Sixth order, occulting	21	21	-----
Large lens, lantern	18	18	-----
Small lens, lantern:			
Range-lens lights	8	8	-----
Lighted beacons	13	13	-----
Fixed port lights (other than beacons)	57	58	+1
Automatic acetylene, flashing	41	41	-----
Gas-lighted buoys	4	4	-----
Electric lights without lens	2	2	-----
Total	198	199	+1
BUOYS			
Gas-lighted 1	4	4	-----
Can, first class	4	4	-----
Can, second class	42	43	+1
Can, third class	25	25	-----
Nun, first class	4	4	-----
Nun, second class	41	41	-----
Nun, third class	25	25	-----
Total	145	146	+1
BEACONS			
Range-lens lights 2	8	8	-----
Lighted beacons 2	13	13	-----
Day beacons	52	51	-1
Total	73	72	-1
Grand total	391	392	1

¹ Not counted in grand total, because they are buoys during the day and lights at night. They are already included among the lights.

² Not counted in grand total, because they are beacons during the day and lights at night. They are already included among the lights.

Of the 199 lights in operation, 145 are watched and 54 unwatched. Of these lights, 139 are using kerosene oil, 13 are operated by electricity, 45 are of the automatic type, and 2 electric globes.

New aids established.—The following aids to navigation were established during the year under review:

Odiongan, west coast of Romblon: One fixed red light, small lens lantern, displayed from a standard concrete tower, was established on September 7, 1929.

Estancia, east coast of Panay: One fixed red light, small lens lantern, displayed from a standard concrete tower, was established on September 14, 1929.

Nasugbu Bay: A second-class black can buoy was established on the south-eastern edge of the shoal south of Pillar Rock, Nasugbu.

Improvements to navigational aids.—An important economy was effected during the year by a change in operation of the Gihulngan and Malitbog lights which, formerly, were attended lights run by mineral oil. They are now run by electricity, through arrangements concluded with reliable private contractors, thus reducing the cost of operation and maintenance without, in the least, lessening their usefulness and reliability.

Engineering and construction.—The following are important projects completed during the year:

One standard 30-foot concrete beacon for Calolbon, Albay.

One standard 30-foot concrete beacon for Panganiban, Catanduanes Island, Albay.

One standard 30-foot concrete beacon for Alabat, Tayabas.

One standard 30-foot concrete beacon for Perez, Tayabas.

One standard 30-foot concrete beacon at Salomague, Ilocos Sur, to replace the old wooden structure.

One standard 30-foot concrete beacon at Calapan, Mindoro, to replace the old beacon.

One 75-foot steel tower at Manuecan Island, to replace the old steel tower.

One standard 30-foot concrete beacon at Capiz, Capiz, to replace the old structure.

The following works were still in progress at the end of the year:

Construction of a standard 30-foot concrete beacon at Mambajao, Misamis Oriental, to replace the old structure.

Construction of a standard 30-foot concrete beacon at San Carlos, Negros Occidental, to replace the old structure.

MARINE RAILWAY AND REPAIR SHOPS

Activities.—The records of the bureau show that a total of 667 work orders were issued and executed by the marine railway and repair shops during the year 1929, as compared with 834 work orders for the preceding year, or a decrease of 167 work orders. A comparative statement of work orders for the last two years is shown in the following table:

	1929	1928	Increase	Decrease
Repairs and overhauling of coast guard cutters and motor ships	62	82		20
Repairs and overhauling of steam and motor launches and motor boats	49	55		6
Repairs on dredges	1	13		12
Repairs on scows	0	1		1
Docking with lay days	15	16		1
Constructions, repairs, and maintenance of lighthouses and lighthouse apparatus	124	140		16
Repairs and overhauling of automobiles and parts and motor cycles and parts	12	45		33
Repairs and overhauling of typewriters, adding machines, and numbering machines and parts	191	198		7
Miscellaneous repairs	213	284		71
Total	667	834		167

Medical inspection.—The following statement shows the work performed by the dispensary at Engineer Island during 1929, as compared with 1928:

Nature of work	1928	1929	Decrease
Consultations with medicine supply	664	463	201
Dressings	2,468	1,361	1,107
Accidents	298	175	123
Operations	47	13	34
Simple remedy packages	35	22	13
Medicine chests refilled	16	6	10

BUREAU OF LABOR

ORGANIZATION AND PERSONNEL

The bureau of labor is composed of six divisions, with a total of 114 officers and employees as of December 31, 1929.

LABOR INSPECTION

Data on labor are secured regularly by inspection. During the year 1929, such inspection covered 138 municipalities of 21 Provinces including the city of Manila. Four thousand seven hundred and forty-two centers of labor employing 79,947 workers were thus inspected, as against 5,106 in 1928, or a decrease of 364 centers of labor. This decrease is due to the fact that field work in connec-

tion with the workmen's compensation act and interisland migration activities occupied a great portion of the time of three inspectors.

The following is a comparative statement of the extent to which regular inspection was carried out during the last five years:

Year	Total		Industrial		Mercantile		Plantation	
	Centers of labor	Workers employed	Number	Workers	Number	Workers	Number	Workers
1925-----	2,821	69,881	2,445	60,418	329	6,067	47	3,396
1926-----	3,245	93,977	2,573	69,948	378	4,243	294	19,786
1927-----	4,584	78,701	3,718	59,608	655	7,783	211	11,310
1928-----	5,106	94,446	4,008	76,611	992	10,941	106	6,891
1929-----	4,742	79,947	3,846	60,481	419	3,055	477	16,411

WOMAN AND CHILD LABOR

The employment of women and children as regards age, hours, conditions, and other related matters, is regulated by Act 3071. In order to enforce its provisions, large and small factories and other centers of labor were inspected in the city of Manila and in some Provinces. The work could not be extended to all the Provinces due to limited personnel.

In Manila, inspectors looked into 597 centers of labor where 11,181 women and 1,170 children were employed, or a total of 12,351 workers, as against 54, centers of labor employing 9,604 women and 1,252 children in 1928, or an increase of 117 establishments and 1,495 workers. It will be noted that the number of children employed decreased by 182.

Women and children are generally engaged in sewing, embroidery, candy wrapping, stripping tobacco, packing cigars or matches, sorting buttons, cutting, labeling, weaving, making cigarettes, cleaning kapok, washing bottles, and other light occupations.

Inspections realized in 1928 and 1929 show the following distribution of women and child labor in Manila, Pasay, and Malabon:

Industry	1928			1929		
	Number of establishments	Women	Minors	Number of establishments	Women	Minors
MANILA						
Aerated water-----	7	34	-----	9	31	3
Asbestos sheet-----	1	10	3	1	-----	4
Bags, repairing-----	10	107	17	12	69	13
Button-----	1	100	17	1	82	25
Candle-----	1	3	-----	-----	-----	-----
Candy-----	9	86	19	10	85	30
Cigar and cigarette-----	40	5,552	927	36	6,486	856
Dessicated coconut-----	1	202	-----	-----	-----	-----
Dressmaker and tailor-----	66	372	32	202	689	24
Embroideries-----	23	1,787	107	23	1,825	82
Glass-----	1	2	-----	2	11	1
Hats-----	6	39	7	17	85	-----
Hemp-----	4	77	16	4	125	6
Ice cream-----	1	2	6	1	2	-----
Kapok-----	-----	-----	-----	2	6	2
Laboratory-----	1	49	-----	1	14	5
Laundries-----	3	271	-----	148	667	-----
Match-----	1	53	8	-----	-----	-----
Printing press-----	24	84	46	19	117	35
Refreshment-----	318	132	-----	65	108	-----
Remnant importers-----	2	15	-----	-----	-----	-----
Shirt-----	16	435	36	24	541	66
Shoes and slippers-----	3	145	-----	15	180	4
Umbrella-----	3	47	11	4	48	14
Vermicelli-----	-----	-----	-----	1	10	-----
Total-----	542	9,604	1,252	597	11,181	1,170
Malabon and Navotas-----	18	806	167	23	894	215
Grand total-----	560	10,410	1,419	620	12,075	1,385

CLAIMS AND COMPLAINTS

Laborers and employees who can not afford to pay for the services of practicing attorneys find a helping hand in the bureau of labor in the prosecution of their claims arising out of the relation between employer and employee, or master and servant. This service is availed of not only by Filipino laborers but also by American employees and other nationals. The number of claims filed, the number of favorable or unfavorable settlements, and the total sums collected for the last five years follow:

Year	Claims and com- plaints	Claim- ants	Adjustment		Amount collected
			Favor- able	Unfavor- able	
1925.....	615	1,371	365	250	₱19,209.63
1926.....	766	1,697	447	319	23,575.26
1927.....	728	1,418	493	235	18,171.91
1928.....	923	2,146	511	412	22,912.21
1929.....	956	1,630	560	396	22,611.79
Total.....	3,988	8,262	2,376	1,612	106,480.80

INDUSTRIAL ACCIDENTS

Under Acts Nos. 3428 and 1874, 38 complaints involving the amount of ₱30,-288.98, were filed in court by the attorney of labor. Of these cases, 12 were settled extrajudicially after the filing of the complaint by payments aggregating ₱5,742.68 in favor of the injured laborers, and 26 cases are still pending in the courts of justice both original and appellate.

A total of 2,055 cases of accidents were registered. A statistical summary of these cases follows:

1. Accident cases: (a) Number, 2,055¹; (b) total amount of compensation paid, ₱57,563.24; (c) total amount of medical expenses, ₱28,434.37; (d) total amount of hospital expenses, ₱3,006.68; (e) total amount of funeral expenses, ₱1,049, aggregating ₱90,053.29.

2. Nationalities of victims: Filipinos, 2,044; Chinese, 3; Japanese, 6; American, 1; Russian, 1.

3. Sex and civil status: These accidents include 2,042 males and 13 females; 1,064 were married and 991 single.

4. Classification of accidents¹: (a) Total number of deaths, 57; (b) number of permanent total disabilities, none; (c) total number of permanent partial disabilities, 45; (d) temporary disabilities, 1 week and under, 326; over 1 week to 2 weeks, 359; over 2 weeks, 608.

5. Compensation benefits classified: Compensation paid for fatal accidents, ₱10,532.60; medical expenses, ₱510.15; hospital expenses, ₱371; funeral expenses, ₱1,049.

Classification by cases of the dependents resulting from these fatal accidents:

(a) Twenty-two widows and 37 children left dependent, 22 cases; mothers and fathers left dependent, 7; brothers and sisters left dependent, 2; no dependents reported, 26.

(b) For permanent total disabilities: None.

(c) For permanent partial disabilities: Compensation paid, ₱9,287.49; medical expenses, ₱5,347.83; hospital expenses, ₱1,632.72.

(d) For temporary disabilities: Compensation paid, ₱37,743.15; medical expenses, ₱22,576.39; hospital expenses, ₱1,002.96.

6. Weighted number of working days' time lost:^{1,2} Fatal, 342,000; permanent total disabilities, none; permanent partial disabilities, 53,700; temporary disabilities, 16,718.

7. Ratio of death cases: Number of accident cases, 2,055; number of deaths, 57; number of deaths per 100 accident cases, 3.

¹ There were 660 cases which were pending for adjustment at the close of 1929.

² The schedule formulated by the committee on statistics and compensation cost of the International Association of Industrial Accident Boards and Commissions has been adopted.

8. *Ratio of machine injuries*

	Number	Percentage
All machine injuries.....	212	10
All other injuries.....	1,843	90
Total injuries.....	2,055	100

9. *Accident cases by industries*

Industries	Number of cases	Percent- age
1. Land and water transportation, wharves, etc.....	487	23.70
2. Oils, fats, etc.....	64	3.11
3. Metal works, etc.....	129	6.28
4. Mining, quarrying, and other stone works.....	235	11.44
5. Food, drinks, tobacco, etc., manufacturing and distribution.....	301	14.65
6. Textiles, clothing, hats, shoes, and leather goods.....	3	.15
7. Building and engineering constructions.....	215	10.46
8. Books, printing, publishing, etc.....	6	.29
9. Wood, furniture, sawmill, and lumber yards.....	343	16.69
10. Miscellaneous and general labor.....	208	10.12
11. Government activities.....	64	3.11
Total.....	2,055	100.00

10. *Accident cases by causes*

Causes	Fatals	Perma- nent total dis- ability	Perma- nent partial dis- ability	Tem- porary dis- ability	Total
1. Machinery.....	13		16	183	212
2. Vehicles (not including construction of).....	14		13	287	314
3. Explosions, electricity, fires, and hot substances.....	6			77	83
4. Poisonous and corrosive substances and occupational dis- eases.....	2			20	22
5. Falls of persons.....	11		2	197	210
6. Stepping on or striking against objects.....				257	257
7. Falling objects (not being handled by injured).....	4		3	193	200
8. Handling of objects.....	4		9	383	396
9. Hand tools.....			1	313	314
10. Animals.....				2	2
11. Miscellaneous.....	3		1	41	45
Total.....	57		45	1,953	2,055

11. *Accident cases by ages*

Under 16 years.....	32	Under 40 years.....		422
Under 20 years.....	342	Under 50 years.....		269
Under 30 years.....	899	60 years or over.....		91

The following table shows the number of accidents settled through the intervention of the bureau of labor during the last five years:

Year	Number of accidents	Victims			Total	Adjustments			
		Degree of injury				Indem- nified	Unin- demnified	Amount collected	
		Tempo- rarily	Perpet- ually	Fatal					
1925.....	430	390	15	48	453	247	206	₱21,706.03	
1926.....	447	390	19	104	513	375	138	25,053.48	
1927.....	452	355	34	143	532	322	210	35,394.81	
1928.....	1,104	968	27	109	1,104	955	149	82,764.96	
1929.....	2,055	1,953	45	57	1,395	1,070	325	90,053.29	
Total.....	4,488	4,054	140	461	3,997	2,969	1,028	254,972.57	

STRIKES AND OTHER INDUSTRIAL DISPUTES

The year saw 26 strikes and other industrial disputes involving 4,939 work-people and 57 establishments as against 38 disputes with 4,729 work-people and 86 establishments for 1928, or a decrease of 12 disputes. Ten were settled in favor of the workers while 16 resulted in favor of the employers. Stoppage or suspension of work had already taken place in 22 disputes before the intervention of the bureau of labor could be put in operation. Much difficulty was encountered in the solution of cases of this nature. At the inception of each controversy the bureau exerted all its efforts to bring about a resumption of work so that no matter how deep the prejudices and passions might have taken root, adjustment of the conflict could be accomplished within the shortest possible time. The solution of the four conflicts involving no stoppage or suspension of work was carried out without difficulty.

Of the 26 disputes, 17 were conducted or initiated by labor unions to which the laborers were affiliated and 9 were declared by unorganized laborers. Thirteen disputes had as their causes questions of wages, either for increase or against decrease, and an equal number was due to other causes.

As a result of the 22 disputes with stoppage or suspension of work, the laborers sustained a total loss of approximately 93,716 working days or ₱149,561.40 in wages as against 43,534 working days or ₱76,226 in wages lost in 1928. The greatest losses were sustained by the workers who took part in the prolonged strike against the "bodegas" of the Pacific Commercial Co. and the one against Chinese slipper makers. This latter strike lasted 107 working days. No estimate has been made of the amount of losses sustained by employers.

Seventeen strikes took place in the city of Manila while 9 occurred in five Provinces, namely, Rizal, Sorsogon, Samar, Iloilo, and Mountain Province.

The following table gives data on the strikes and other industrial disputes settled through the intervention of the bureau of labor during the last five years:

Year	Strikes and other industrial disputes			Number of work-people involved	Causes of conflicts		Adjustment in favor of	
	Total	Unionists	Non-unionists		Wages	Other causes	Work-people	Employer
1915-----	23	18	5	9,936	12	11	19	4
1926-----	27	24	3	7,279	18	9	16	11
1927-----	53	40	13	8,567	33	20	39	14
1928-----	38	27	11	4,729	21	17	21	17
1929-----	26	17	9	4,939	13	13	10	16
Total-----	167	126	41	35,450	97	70	105	62

FREE EMPLOYMENT AGENCIES OF THE BUREAU OF LABOR

During the year, 2,194 workers of different trades or occupations including domestic helps were registered in the employment agencies of the bureau. Out of this number 1,609 or 72.9 per cent were placed or employed. In this connection, it should be stated that the majority of the applicants who failed to secure employment aspired for clerical positions.

The numbers of workers registered and placed by the bureau of labor during the last five years are given below.

Year	Registration	Placement	Percent- age
1925-----	5,106	4,469	87.5
1926-----	3,879	3,208	82.7
1927-----	2,549	2,064	80.9
1928-----	2,686	2,260	83.8
1929-----	2,194	1,609	72.9
Total-----	16,414	13,610	82.9

EMBARKATION AND EXECUTION OF CONTRACTS OF SEAMEN

There were registered 606 contracts involving 24,216 seamen as against 25,692 seamen for the year 1928, or a decrease of 1,476.

During the last five years contracts and embarkations of seamen number as follows:

Year	Contracts		Embarkations (seamen)		Total
	Number	Collection	New	Renewal	
1925.....	606	₱192.60	12	21,576	21,588
1926.....	635	226.95	34	24,465	24,499
1927.....	547	192.60	27	22,289	22,316
1928.....	609	182.40	20	25,672	25,692
1929.....	606	197.70	25	24,191	24,216

In using these figures for statistical purposes one should not lose sight of the fact that they merely represent the actual number of embarkations made as per contracts formalized. Contracts were frequently renewed, due to the desire of shipowners to get rid of undesirable men without much inconvenience. At the request of shipowners the average duration of contract ranges from one round trip to three months.

INTERISLAND MIGRATION

Through the agency of the bureau 2,574 home seekers, including members of families, were recruited and shipped to Mindanao and Mindoro, or an increase of 766 individuals over that of the previous year. Of the ₱60,000 appropriated for transportation, subsistence, and quarters of emigrants, ₱57,005.50 were expended at a per capita cost of approximately ₱22.15.

The following table gives the destinations of home seekers and the expenses incurred for their transportation, subsistence, and quarters during the year 1929:

Destination	Total members	Number of family	Cost of transportation, etc.
Agusan.....	66	9	₱1,465.00
Bukidnon.....	20	6	297.50
Cotabato.....	1,343	207	28,242.50
Davao.....	734	91	18,120.00
Lanao.....	14	2	180.00
Sulu.....	12	1	245.00
Zamboanga.....	298	48	7,805.00
Total.....	2,487	364	56,355.00
Mindoro.....	87	16	650.50
Grand total.....	2,574	380	57,005.50

The next table shows data of emigrant home seekers recruited and sent by the bureau of labor to sparsely populated regions during the last five years:

Year	Total	Emigrant home seekers	Members of families	Expenses incurred
1925.....	962	213	749	₱15,302.35
1926.....	1,561	337	1,224	27,010.50
1927.....	1,556	312	1,244	28,315.50
1928.....	1,808	280	1,528	41,166.00
1929.....	2,574	380	2,194	57,005.50
Total.....	8,461	1,522	6,939	168,799.85

FILIPINO EMIGRATION TO THE TERRITORY OF HAWAII

During the year 8,369 Filipinos emigrated to Hawaii, composed of 8,189 males, 134 females, and 46 minors as against 9,322 for 1928, made up of 9,026 males, 153 females, and 143 minors, or a decrease of 953 in the aggregate number. On the other hand, 3,991 persons returned to the Philippines as against 4,839 for 1928, or a corresponding decrease of 848.

The greatest number of emigrants came from the following Provinces: Ilocos Norte, 2,654; Pangasinan, 1,727; Ilocos Sur, 1,299; Tarlac, 759; La Union, 566; Abra, 342; or a total of 7,347, or about 87 per cent of the whole number of emigrants. As in previous years, the Ilocano regions continue to furnish the greater bulk of the emigrants to Hawaii.

The number of Filipino emigrants to, and of those who returned from, the Territory of Hawaii during the last five years are as follows:

Emigrants to Hawaii

Year	Total	Number		
		Male	Female	Minor
1925	6,519	6,104	256	159
1926	3,356	2,977	160	219
1927	10,074	9,784	120	170
1928	9,322	9,026	153	143
1929	8,369	8,189	134	46
Total	37,640	36,080	823	737

Emigrants who returned to the Philippines

Year	Total	Number		
		Males	Females	Minors
1925	2,754	2,183	264	307
1926	3,390	2,562	348	480
1927	3,565	2,410	510	645
1928	4,839	3,968	379	492
1929	3,991	3,402	241	348
Total	18,539	14,525	1,742	2,272

COST OF LIVING

There was noted an increase in the cost of living of laborers during the year as compared with 1928. This was mainly due to prevailing higher prices of rice. A slight change was likewise noted as to other items that enter in the cost of living of a laborer's family, namely, clothing, housing, fuel and light, and sundry. The estimated daily cost of living of common and skilled laborers (single and married) employed in industries in some towns of the islands is as follows:

City or town	Skilled		Common	
	Single	Married	Single	Married
Cebu	₱1.31	₱2.82	₱0.85	₱2.11
Cotabato	1.34	2.69	.94	2.35
Iloilo	1.23	2.37	1.07	2.25
La Union	1.23	2.53	.94	2.01
Legaspi	1.40	2.53	1.10	2.16
Manila, city of	1.57	2.84	1.50	2.17
Mindoro	1.28	2.51	1.08	1.92
Occidental Negros	1.29	2.88	.96	2.13
Oriental Negros	1.04	2.39	.97	1.82
Average, 1929	1.30	2.62	1.05	2.10
Average, 1928	1.14	2.32	.92	1.79

In using these figures caution should be exercised, as they are not the results of extensive surveys but merely estimates of the cost of living in certain localities by labor deputies of the bureau of labor based upon prevailing prices of commodities. However, for practical purposes the figures give an idea of labor cost.

FINANCIAL STATEMENT

The sum of ₱198,000 was made available for the expenses of the bureau for the year. Of this amount, ₱195,028.57 were expended as against ₱193,351.09 for 1928, or a slight increase of ₱1,677.48 in expenditure. The appropriation for the transportation of homeseekers in 1929 was ₱60,000, the same as in 1928. The salary and expenditures of the resident labor commissioner in Hawaii also remained the same.

The receipts of the bureau for license fees, service income, and miscellaneous sources amounted to ₱17,333.72 as against ₱12,159.49 for 1928, or an increase of ₱5,174.23.

BUREAU OF COAST AND GEODETIC SURVEY

PERSONNEL

With the exception of the usual transfer of the surveying officers between the United States and the Philippines, the personnel of the bureau remained unchanged during the year. The strength of field and office force was maintained.

SURVEY SHIPS

"Pathfinder."—The party on this ship was, at the beginning of the year, delineating the shore line of the southeastern extremity of Mindanao from Sarangani Island northward along the western shore of the Gulf of Davao. Soundings were made of the waters adjacent to this area. The work was discontinued in March so that the ship could take up the work of sounding the important channels north of Luzon Island. After a period of a month spent in Manila for minor repairs and refitting, the ship proceeded to Balintang Channel for the season's work.

Although interrupted on several occasions by severe storms passing over northern Luzon during the typhoon season, the work was continued with satisfactory results until the last of September. At this time the advent of the northeast monsoon made further operations in this vicinity impossible, and the ship returned to Manila for some minor repairs and necessary preparations for survey work in the southern islands. The work in the Gulf of Davao was resumed and carried on throughout the remainder of the year.

"Fathomer."—Early in the year this ship left Manila and commenced the survey of Dumanquilas Bay on the south coast of Mindanao. In March it discontinued the work and came to Manila, where it underwent annual repairs and overhauling for two months.

After doing magnetic work, later, in Mindoro Strait, the ship proceeded to the eastern coast of Luzon where field work in the vicinity of Casiguran Sound was taken up from the limits completed the previous year. This work progressed steadily until October, when the season was closed on account of unfavorable weather conditions. A field investigation was made off Infanta, Tayabas, of changes which occurred in the shore line and approaches to the shore as the result of the typhoon of September 3 and 4. This storm caused heavy floods and wave action which changed the configuration of the coast in this vicinity. Early in November the *Fathomer* proceeded to the southern coast of Palawan where a reconnaissance was made for further surveys. On December 8 work was interrupted, the ship heading to the west coast of the island to rescue the crew of the Japanese steamer *Kenkyu Maru* which sank off that coast. Fortunately all the survivors of the ship were picked up by the *Fathomer* and provided with medical treatment, food, and clothing. The ship proceeded to Sandakan for coal and thence to Manila where the personnel of the sunken steamer were transferred to a Japanese steamer for passage to Japan. During the remainder of the year the vessel was undergoing repairs.

"Marinduque."—The vessel was undergoing annual repairs and overhauling in the first part of the year. The party of this ship was engaged in completing surveying records, and preparing the survey work in the southern islands until March 18. From the latter date until September 13, operations were in progress in Dumanquilas Bay, Mindanao. The topography and hydrography of this bay were completed and the party proceeded immediately to Tawitawi, Sulu,

and took up the extension of surveys southeast of that island. In the latter part of November this work was interrupted and the vessel proceeded to Manila to undertake annual repairs which were in progress at the close of the year.

MANILA STATION

It is from this station that the field work of the survey parties is directed and where the compilation of the results is carried on. During the year under review, the routine clerical work, including the handling of supplies and equipment to properly fit the vessels in the field, was satisfactorily executed. A fireproof vault was constructed for the safe-keeping of the valuable field records and survey sheets which have been accumulating since the organization of the survey.

The computing division at this station continued the office computation of field triangulation, reduction of soundings, establishment of tidal data, and listing of magnetic information.

The drafting division prepared field projections for new survey operations, plotted hydrographic sheets, and compiled from the field data submitted charts and maps showing additional information.

The geographical division proceeded with the compilation of the latest information for the publication of new editions of topographic maps showing details of the interior of the various islands in so far as that information had been gathered by the various agencies of the government.

The dissemination of publications and advice respecting charts, maps, and navigation of Philippine waters was carried on by the nautical division. As the result of a field examination made during the year this division rewrote the coast pilot for the southern section of the islands. The manuscript has been forwarded to Washington for publication.

In the photolithographic division, new charts and new editions of charts and maps were published and placed on sale for the benefit of the public. To assist other bureaus of the Philippine government and the United States Army, special work was performed in this division in the preparation of drawings, printing of maps and harbor plans.

FINANCIAL STATEMENT

The expenditures of the bureau during the year amounted to ₱647,961.92. Of this total, the government of the Philippine Islands contributed ₱293,176.14 and the balance of ₱354,785.78 was paid by the Government of the United States. An income of ₱5,363.24 was produced from this source.

For the maintenance of the bureau of coast and geodetic survey since its establishment in 1900 up to the end of 1929, the Federal Government put up an aggregate of ₱9,327,553.20, or 59.116 per cent of total expenditures of ₱15,778,-469.80. The insular government paid 40.884 per cent, or ₱6,450,916.60 of this sum.

BOARD OF ACCOUNTANCY

Hon. Vicente Carmona, president; Mr. D. T. Dikit, secretary-treasurer; Mr. Salvador Lagdameo, member; all as of December 31, 1929.

The year commenced with Mr. W. W. Larkin, chairman, Mr. D. T. Dikit, secretary-treasurer, and Hon. Vicente Carmona, member, composing the board. On April, 12, 1929, Mr. Larkin's term expired and Mr. Salvador Lagdameo, insular treasurer, was appointed to the vacancy.

Out of the 43 candidates to the certified public accountant examination held on December 17-19, 1928, only 14 obtained the passing grades and were granted certificates of registration as certified public accountants.

During the year 1929, one certified public accountant certificate No. 204, was issued under section 11 of Act 3105; one public accountant certificate No. 299, was also issued under section 12 of Act 3105, as amended by Acts 3264 and 3302.

There were 40 candidates who were admitted in the examination given by the board on December 16, 17, and 18, 1929, of whom 17 were repeaters.

The statement of income and expenditures for the year ended December 31, 1929, compared with the preceding year, follows:

	Dec. 31, 1929	Dec. 31, 1928
EXPENDITURES		
Operating expenses:		
Salaries and wages	₱3,060.00	₱4,800.00
Salaries and wages (temporary)	300.00	291.81
Travel expenses of personnel	1.00	.40
Postal, telegraph, telephone, and cable service	12.34	6.92
Miscellaneous service	60.90	49.45
Consumption of supplies and materials	108.94	196.56
Printing and binding reports	50.00	50.00
	3,593.18	5,395.14
Outlays: Furniture and office equipment		150.00
Total	3,593.18	5,545.14
INCOME		
Examination fees	1,350.00	1,150.00
Renunciation fees	350.00	1,190.00
Issuance of certificates	220.00	240.00
Repayment, prior year's expense	64.42	
Total	1,984.42	2,580.00
Excess of expenditures over income	1,608.76	2,965.14

BOARD OF EXAMINERS FOR CIVIL ENGINEERS

Mr. Luis Francisco, chairman; Mr. Procopio Eleazar, secretary-treasurer; and Mr. Julian Vallarta, member; all as of December 31, 1929.

The year commenced with Messrs. Luis Francisco, chairman, Paul W. Mack, secretary-treasurer, and Julian Vallarta, member, composing the board. Upon the expiration of the term of Mr. Paul W. Mack, Mr. Procopio Eleazar was appointed to succeed him effective July 13, 1929. The other two members were reappointed.

In the two examinations given by the board in January and July there were 91 applicants, of whom 74 were qualified and granted certificates. Five applications for certificates without examination were approved during the year in accordance with section 11 of Act 2985. During the same period, five oral examinations were conducted, the candidate failing to qualify in every case. Upon reconsideration of four applicants examined, two were allowed to pass. There were therefore, 81 certificates in all granted in 1929.

During the year under review, the board received ₱610 for 61 certificates of registration and ₱2,730 for 91 applications for examinations, or a total of ₱3,340. The expenditures amounted to ₱1,084.45.

BOARD OF EXAMINERS FOR MECHANICAL ENGINEERS

Messrs. Clemente Hidalgo, chairman; Angel P. Fojas, secretary-treasurer; and Francisco Yeasiano, member; all as of December 31, 1930.

The year commenced with the above-mentioned members composing the board, they having been reappointed for another term.

The board held seven meetings during the year, and one examination on July 9-10, 1929. Of the 12 applicants who took this examination, only 7 passed and were given certificates of registration. In addition to the seven certificates issued, a duplicate copy of certificate No. 16 was given by the board to Mr. Henry L. Reich upon payment of ₱10 as certificate fee, the original having been destroyed by rain and anay.

The collection of the board for the year 1929 amounted to ₱440, ₱360 of which were for examination fees and ₱80 for certificate fees. During the same period, the board spent a total of ₱377.62 for per diems, materials, publication, repair of filing cabinet, and repair of typewriter, or ₱62.38 less than its income.

BOARD OF EXAMINERS FOR ELECTRICAL ENGINEERS

Messrs. Irwin McNiece, chairman; Ciriaco Coronel, secretary-treasurer; and Leroy H. Thompson, member; all as of December 31, 1929.

At the beginning of the year, the board was composed of Messrs. Irwin McNiece, B. W. Brooks, and Ciriaco Coronel. Upon the expiration of the term of Mr. Brooks, Mr. Leroy H. Thompson was appointed in his place, effective August 23, 1929.

Out of the two applicants who took the examination only one passed but has not registered yet.

Only one certificate was issued within the year to one applicant for certificate without examination.

During the year under review the board received ₱60 for examination fees and ₱10 for the issue of the said certificate, or a total of ₱70; and spent ₱60 for per diems and ₱122.85 for materials, publications, stationery supplies, etc., or a total of ₱182.85.

BOARD OF EXAMINERS FOR ARCHITECTS

Mr. Carlos A. Barretto, chairman; Mr. Cheri Mandelbaum, secretary-treasurer; Mr. Fernando Ocampo, member; all as of December 31, 1929.

With the reappointment of Messrs. Carlos A. Barretto and Cheri Mandelbaum and the appointment of Mr. Fernando Ocampo a new board of examiners for architects was appointed under department order No. 91. At the meeting of the board on July 29, 1929, Messrs. Carlos A. Barretto and Cheri Mandelbaum were elected chairman and secretary-treasurer, respectively.

During the year the board held two examinations, in which one out of three candidates passed.

The examination fees and for one certificate of "architect," the board collected ₱130 during the year, and spent ₱598.20 for per diems, postage, stationery supplies, and publication for examinations.

BOARD OF EXAMINERS FOR CHEMICAL ENGINEERS

Mr. Francisco D. Reyes, chairman; Mr. José Espinosa, secretary-treasurer; Mr. Rafael H. Aguilar, member; all as of December 31, 1929.

Under department order No. 61, the above-named persons were reappointed to the board of examiners for chemical engineers for another year. At the first meeting of the new board, Mr. Francisco D. Reyes was elected chairman and Mr. José Espinosa, secretary-treasurer.

During the year 1929 the board collected ₱70 for one application for examination and for four certificates of registration. For per diems, publication for examinations, and postage the board spent a total of ₱238.20.

The amount of ₱633.33 was allotted to the board from the appropriated funds of ₱3,800, leaving a balance of ₱395.13, after deducting the total expenditure of ₱238.20.

BOARD OF EXAMINERS FOR MINING ENGINEERS

Dr. Victoriano Elicáñio, chairman; Dr. Leopoldo A. Faustino, secretary-treasurer; and Mr. Ramón Abarquez, member; all as of December 31, 1929.

Messrs. Victoriano Elicáñio, Leopoldo A. Faustino, and Antonio D. Alvir constituted the board at the beginning of the year under review. Upon the expiration of the term of Mr. Alvir, Mr. Ramón Abarquez was appointed to succeed him, effective April 26, 1929.

During the year there were approved two applications for certificate without examination.

The board collected ₱20 for the two certificates mentioned, and spent ₱153.49 for per diems, supplies and materials, and publications.

CONCLUSION

The foregoing is a record of facts and accomplishments. Efforts have been exerted to have this report complete, but details had to be left out so as not to increase the size of this volume. Care has been taken not to include controvertible statement of policies. Recommendations and personal opinions and beliefs have, therefore, been reserved.

Very respectfully,

FILEMON PEREZ,
Secretary of Commerce and Communications.

INDEX

	Page
Abaca:	
Exports of	78, 107
Production	168
Accidents:	
Industrial	243
Marine	110
Agricultural:	
Bank loans	100
Clubs	57
Extension division	170
Agriculture:	
Bureau of, work of	167
Division of work of bureau	5
Conditions	160
Schools of	57
Agriculture and Natural Resources, Department of:	
Report of Secretary of	159
Review of department of	15
Albert, Dr. Alejandro:	
Mentioned	8
Report of	42
Alcoholic products	118
Alunan, Raf. R., report of	159
Animal husbandry, division of	171
Appointments:	
Ex officio	6
Confirmation of	7
Artesian wells	216
Assessed value of property	31, 37, 38, 84
Attorney General. (<i>See</i> Justice, Bureau of.)	
Baguio, municipal report	38
Balance of trade	104
Banking:	
Bureau of	124
Conditions	79
Banks and bankers	121
Banks:	
Postal savings	222
Statement of condition	125
Beriberi	51, 69
Bilibid prison, industrial division	155
Births	66, 67
Bonded indebtedness	11, 84, 96
Statement of bond fund	38, 84, 87
Bridges, construction of	206
Brokers, licensing of	234
Budget:	
Cash balances	86
Comments on	25
Statement of	80
Bukidnon pineapple reservation	162
Business conditions	77, 118, 200
Cabinet	1
Cable laid	15, 224
Cacao, production of	168

	Page
Cadastral cases. (See Land registration.)	
Cash balances	86, 89
Cattle, importation of	4, 162
Cebu Portland Cement Co.	84
Cedulas	120
Cerebrospinal meningitis	11, 51, 54
Child labor	241
Children, care of dependent	35
Cigars	119, 123
Coast and Geodetic Survey, work of	247
Coast Guard Service	13
Coastwise trade	109
Coconut oil, exports	78, 107
Coconuts:	
Production of	167
Desiccated, exports of	78
Coffee, production	168
Commerce	200
Commerce and Communications, Department of	14
Report of Secretary of	199
Commerce and Industry, Bureau of:	
Investigation of	7, 199
Work of	299
Commercial intelligence service	231
Conditions, general	29
Constabulary	34
Consular service	110
Cooperative marketing	235
Copra:	
Exports of	78, 107
Meal, exports of	78, 107
Corn, production of	168
Corporations registered	202
Supervision of sale of securities of	101
Cost of living	246
Courts:	
Manila	38
First instance, work of	140
Supreme, work of	139
Council of State	2, 20
Criminality	150
Currency, circulation of	79
Customs:	
Bureau of, report of	104
Receipts	104
Davis, Gov. Gen. Dwight F.:	
Inaugural address	18
Message to legislature	20
Report	1
Deaths	66, 67
Deeds, registration of	146
Dentists, board of examiners	37
Depositories	89
Desiccated coconuts, exports of	107
Diphtheria, cases reported	69
Dysentery, cases reported	51, 68
Earthquake fund	93
Economic development, need for	21, 22
Economic situation	7
Education (See Schools), Bureau of, work of	8, 45
Educational research	43
Embroidery, exports of	78, 107
Emigrant homeseekers	245
Emigration	110
To Hawaii	246

	Page
Employment agencies, free	244
Examiners, boards of	37, 248, 250
Excise tax collected	114
Executive Bureau, work of	30
Exports	78, 106, 201
Fiber standardization board	196
Fidelity bond premium fund	92
Finance:	
Department of	11
Secretary of, report of	77
Firearms, taxes on	122
Fiscals:	
Provincial	145
Qualifications required	145
Foreign trade	77, 105
Foreign carrying trade	107
Forest:	
Administration	160
Concessions granted	174
Licenses and permits	175
Products, exports of	173
Forestry, Bureau of, work of	173
Franchise law, uniform	6
Friar lands	186
Gasoline tax	104
General land registration office	145
Gold:	
Production of	16
Standard fund	79, 94
Governor General:	
Inaugural address	18
Message to legislature	20
Report of	1
Government piers	112
Hats, exports of	78, 107
Health:	
Education	44, 46
Service	9, 50
Factory inspection	71
School inspection	71
Statistics	65-75
Vaccines and sera used	73
Hemp. (See Abaca.)	
Hospitals	10, 52, 70
Number and capacity	72, 73
Philippine General	36
Immigration	111
Imports	78, 105, 201
Inaugural address	1, 18
Income tax	121
Infant mortality	67
Influenza, cases reported	68
Insane	73
Asylum	52
Insurance	79, 101, 121
Interior:	
Department of	14
Secretary of, report of	29
Interisland shipping	15
Internal Revenue:	
Bureau of, report of	114
Collections	104

	Page
Investigations:	
Administrative	7
Irregularities	199
Irrigation systems	213
Jails, provincial	153
Justice:	
Bureau of	143
Department of	17
Secretary of, report of	139
Justice of the peace courts	143
Labor, Bureau of, work of	240
Land:	
Cadastral cases tried	142
Classification	176
Registration, status of cases	146, 186
Title, assurance fund	92
Lands:	
Applications for	181
Claims and conflicts	185
Classification of	160, 176
Disposition of public lands	16, 161
General land registration office	145
Surveys	182, 183
Bureau of, work of	180
Legislation:	
Approved	3
Delays in	3
Legislature:	
Opening of	2
Results of session	2
Lepers paroled	70
Leprosy, status of work	10
Library, national	156
License tax collected	114, 120
Lighthouse Service	238
Livestock	169
Los Banos quarry	217
Lumber:	
Exports of	78, 107
Output of	160
Maguey, production	168
Malaria	51
Cases reported	69
Manila:	
Municipal report	37
Railroad Co	85
Marine railway and repair shops	230, 240
Market-quotation service	233
Marriages	66, 67
Measles, cases reported	68
Medical examiners, board of	37
Mercantile documents, registration of	236
Message of transmittal	v
Metropolitan water district	39
Mining claims located	160, 181
Mint	101
Money-order service	221
Motor-vehicle registration	217
Mutual benefit societies	101
National Coal Co	84
Development Co	84
Museum	193

	Page
Naturalization	41
Non-Christian tribes, bureau of	32
Palma, Rafael, quoted	21
Patents and trade-marks registered	237
Pearl fishing, revenue from	122
Pensionados	40
Perez, Filemon, report of	199
Periodicals registered	22
Pharmacists, board of examiners	37
Philippine:	
General Hospital	36
Health Service. <i>See</i> Health Service.	
National Bank	12, 85
Research Institute	164
Pineapple cultivation	16
Plant investigations, division of	169
Plant pest control, work of	171
Port works	210
Ports of entry, foreign trade of	112
Postal:	
Business	219
Savings bank	222
Posts, Bureau of, work of	218
Investigation	199
Prices of commodities	202
Printing, Bureau of, work of	127
Prisons, Bureau of	149
Property insurance fund	92
Public:	
Buildings	209
Debt	96
Improvements, local, financing of	31
Instruction, Department of	8
Secretary of, report of	43
Lands. <i>See</i> Lands.	
Service Commission	147
Welfare Commissioner, work of	35
Works, Bureau of, work of	203
Quarantine	11, 53, 75, 76
Quezon, Manuel, referred to	20
Radio:	
Communications	15
Service	223, 226
Registration fees	122
Railway bonds, guaranty of interest on	100
Receipts and expenditures	80, 82
Reforestation	178
Registers of deeds appointed	145
Revenues:	
Need of increased	22, 31
Non-Christian Provinces	33
<i>See</i> Receipts.	
Rice, production of	167
Rice and corn fund	194
River control projects	215
Roads	14, 203
Roxas, Manuel, referred to	20
Rural credits	16
Division, work of	171
Sales tax collections	114, 120
San Lazaro estate	158
Santos, Jose A., report of	158

Schools:	Page
Private—	
Classification	61
Enrollment	49, 62, 63
Instructors in	50
Number	61
Supervision of	48
Public—	
Agriculture	46, 57
Attendance	45, 55
Enrollment	45, 55
Expenditures for	47, 59
Financial problems	47
Vocational work	46
Science, Bureau of	188
Scientific activities	162
Secretary of War, letter of transmittal, vi.	
Seed farms	170
Sewerage systems	216
Sinking funds	84, 86, 98
Smallpox	51
Sponge fishing, revenue from	122
Stock herds and farms	195
Strikes	243
Sugar:	
Exports of	78, 106
Limitation of imports into United States	2, 20
Production	167
Supply, Bureau of, work of	226
Supreme Court, work of	139
Taxation, revenue from	80, 82
Taxes:	
Excise	114
Franchise	122
Income	121
Inheritance	122
License	114
Property	31
Sales	114
Teachers:	
Experience of	61
In private schools	64
Pension fund	48
Professional training	61
Qualifications of	46
Replacement	47, 60
Salaries	47, 56
Tenure	47, 60
Telegraph service	223
Tobacco:	
Production	119, 168
Exports of	78, 107
Tobacco promotion work	123
Tourists guide service	236
Trade:	
With the United States	12, 77, 105
With foreign countries	13, 105
Treasurer of the United States, account of	93
Treasury:	
Bureau of, report of	79
Certificate fund	79, 95
Tuberculosis	10, 51, 69
Typhoid fever cases reported	67
Typhoons	29

	Page
United States:	
Exports to-----	78
Imports from-----	79
Army Medical Department, research board-----	191
University of the Philippines, branch of-----	5
Unson, Miguel, report of-----	77
Ventura, Honorio, report of-----	29
Vessels:	
In the carrying trade-----	77, 107
Coastwise-----	109
Vital statistics-----	66, 67
Vocational education-----	46
Water rights-----	214
Waterworks-----	216
Weather Bureau, work of-----	192
Welfareville-----	35



